Usenet Newsgroup Archive: rec.radio.amateur.space

2005

These Usenet messages were preserved as a plain-text archive. This PDF was generated by Digital Library of Amateur Radio & Communications from the source text file in 2026.

Date span: 2005-01-03 through 2005-12-31

Source text: rec.radio.amateur.space.txt

Source item: https://archive.org/details/usenet-rec

Messages included in this PDF: 442

Message records with no readable body available in the source text: 2

Messages are presented chronologically by archived date.

Binary or encoded payloads are not printed as blocks of encoded text; a placeholder appears where such material was detected. The original source text is unchanged.

1. ANN:Free satellite tracking software with source code

Newsgroup: rec.radio.amateur.space
Date: 2005-01-03 23:11:09 UTC
From: Siamack <siamack@airmail.net>
Message-ID: <1104793869.866887.185040@f14g2000cwb.googlegroups.com>
Source record: 2215
Cross-posted to: rec.radio.amateur.misc, rec.radio.amateur.space

Hello All Netlanders,

I have put up a new version of my free satellite tracking package for
public perusal and use. You can download the binary package and the
source from www.program9.com. go to the bottom of the page.
The math, site data base and the maps are all parts of other free
programs. I just put them together (more or less.)
Have Fun,

Siamack
73 DE WJ1Q

2. AO-51 return?

Newsgroup: rec.radio.amateur.space
Date: 2005-01-07 12:28:17 UTC
From: GeorgeF <av8tor@licensed4funREMOVEBEFOREFLIGHT.com>
Message-ID: <BfvDd.27$C52.20@newsread2.news.atl.earthlink.net>
Source record: 2216

Anyone know when AO-51 will be returning to FM Repeater mode? Recently moved, just got the sat antennas re-installed, all excited for the AO-51 pass then discovered no FM Repeater.....

George - Daytona Beach, FL
http://www.MilAirComms.com

3. Re: AO-51 return?

Newsgroup: rec.radio.amateur.space
Date: 2005-01-07 13:27:46 UTC
From: Pat Cox <peacox@gloryroad.net>
Message-ID: <41DE8E52.4DBE0BDD@gloryroad.net>
Source record: 2217

AO-51 will be in V/S (2 mtr up/ 2.4 GHZ down) for a week beginning Jan. 6, 2005. pcox

GeorgeF wrote:

> Anyone know when AO-51 will be returning to FM Repeater mode? Recently
> moved, just got the sat antennas re-installed, all excited for the AO-51
> pass then discovered no FM Repeater.....
>
> George - Daytona Beach, FL
> http://www.MilAirComms.com

4. Radio Meteor Obs. Bulletin December 2004 Geminids Ursids

Newsgroup: rec.radio.amateur.space
Date: 2005-01-09 22:53:37 UTC
From: Chris Steyaert <steyaert@vvs.be>
Message-ID: <0bd3u0tv5jmoigcd01658i4u3th943pg93@4ax.com>
Source record: 2218
Cross-posted to: rec.radio.amateur.space,sci.astro.amateur

Radio Meteor Observation Bulletin No. 137 of December 2004 (90 K) is available as

http://visualrmob.free.fr/rmobtext/rmob0412.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

Chris

5. Re: AO-51 return?

Newsgroup: rec.radio.amateur.space
Date: 2005-01-10 13:43:17 UTC
From: William Erhardt <erhardt@mt.net>
Message-ID: <1Y-dnQJTVezoG3_cRVn-qg@mt.net>
Source record: 2219

Howdy from Bill K7MT

To check any satellite status or latest bulletin on all satellites go to:

http://www.amsat.org

It is continually updated by the AMSAT folks.

Cheers Bill K7MT

6. Recommedation for pc control of G-5500 alt/az rotor

Newsgroup: rec.radio.amateur.space
Date: 2005-01-10 16:51:37 UTC
From: Jim Fawns <jfawns@vif.com>
Message-ID: <1105375896.914599@www.vif.com>
Source record: 2220

Any recommended commercially bought controller for the Yaesu G-5500 alt/az ant rotor. I am looking for one that can also tune the radio to adjust for Doppler as well as control the rotor.

I was trying to check out the Spectrum International Inc. , Uni-Trac 2003 or Multi-Trac 2001 at the link spectrum@spectrum-intl.com but that link is dead, What happen to this company? Seen their ad as recent as the Spring 2004 issue of CQvhf magazine.

Finally any homebrew info would also be appreciated.

Jim
VE3JAT

7. Re: Recommedation for pc control of G-5500 alt/az rotor

Newsgroup: rec.radio.amateur.space
Date: 2005-01-11 00:11:27 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <PQEEd.3399$KJ2.694@newsread3.news.atl.earthlink.net>
Source record: 2221

"Jim Fawns" <jfawns@vif.com> wrote in message
news:1105375896.914599@www.vif.com...
> Any recommended commercially bought controller for the Yaesu G-5500 alt/az
> ant rotor. I am looking for one that can also tune the radio to adjust for
> Doppler as well as control the rotor.
>
> I was trying to check out the Spectrum International Inc. , Uni-Trac 2003
or
> Multi-Trac 2001 at the link spectrum@spectrum-intl.com but that link is
> dead, What happen to this company? Seen their ad as recent as the Spring
> 2004 issue of CQvhf magazine.
>
> Finally any homebrew info would also be appreciated.
>
> Jim
> VE3JAT

Go here and check out the free program and interface schematic.
http://ludens.cl/Electron/fodtrack/fodtrack.html
It is not a great looking program but will work. I have used the interface
to control the rotator but have not had a rig that could be controlled for
frequency so have not tried that out. Sometimes I run that program and
anotther program at the same time just for the graphics of the other
program.

8. Re: Recommedation for pc control of G-5500 alt/az rotor

Newsgroup: rec.radio.amateur.space
Date: 2005-01-12 12:14:13 UTC
From: Dennis Kaylor <k4oxg@tampabay.rr.com>
Message-ID: <pw8Fd.231788$6w6.141971@tornado.tampabay.rr.com>
Source record: 2222

hey jim
i was looking for the same thing awhile back and found a site for
Autotrack but i cant seem to find the URL any more
it controls the rotor and the rig but its pricey $450USD
good luck

Jim Fawns wrote:
> Any recommended commercially bought controller for the Yaesu G-5500 alt/az
> ant rotor. I am looking for one that can also tune the radio to adjust for
> Doppler as well as control the rotor.
>
> I was trying to check out the Spectrum International Inc. , Uni-Trac 2003 or
> Multi-Trac 2001 at the link spectrum@spectrum-intl.com but that link is
> dead, What happen to this company? Seen their ad as recent as the Spring
> 2004 issue of CQvhf magazine.
>
> Finally any homebrew info would also be appreciated.
>
> Jim
> VE3JAT
>
>
>
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>

9. Sats

Newsgroup: rec.radio.amateur.space
Date: 2005-01-16 02:53:08 UTC
From: Sarge <sarge43@NOSPAMev1.net>
Message-ID: <10ujlon37jsga28@corp.supernews.com>
Source record: 2223

I'd love to work some staellites or the space station. All I have is a IC 2100 and an FT5200 both on jpoles. Fm voice only. I want the kids to see it happen to peak their interest.
Right now I don't even hear anything from any of the sats. Are there any that I can work with the set up I have?

Thanks so much,
Sarge W5SRG

10. Re: Sats

Newsgroup: rec.radio.amateur.space
Date: 2005-01-16 03:32:18 UTC
From: dougmc@frenzy.com
Message-ID: <6flGd.17178$Ta2.14353@fe2.texas.rr.com>
Source record: 2224

In article <10ujlon37jsga28@corp.supernews.com>,
Sarge <sarge43@NOSPAMev1.net> wrote:

| I'd love to work some staellites or the space station. All I have is a IC
| 2100 and an FT5200 both on jpoles. Fm voice only. I want the kids to see it
| happen to peak their interest.
| Right now I don't even hear anything from any of the sats. Are there any
| that I can work with the set up I have?

You could work the ISS easily enough -- just find a pass where it's as
high in the sky as possible.

http://heavens-above.com/ is quite useful in that regard. Be sure to
log in and tell it your position. Then pick a good pass and see if
you can hear it -- usually you can with even a HT, just turn the
squelch all the way down.

I haven't tried to work it in a while, but usually it's in packet
mode, at least it was the last few times I tried. And when it is in
voice mode, it's extremely busy. I'm guessing it'll be less busy if
it's 4 am, but I haven't tried.

http://www.rac.ca/ariss/faqariss.htm may help. I recall finding an
even better FAQ out there somewhere, but can't seem to find it now.

--
Doug McLaren, dougmc@frenzy.com
Consciousness: That annoying time between naps.

11. Re: Sats

Newsgroup: rec.radio.amateur.space
Date: 2005-01-16 05:11:40 UTC
From: Sarge <sarge43@NOSPAMev1.net>
Message-ID: <10ujtsf1r26ttbe@corp.supernews.com>
Source record: 2225

I don't have packet equipment, only fm voice. I'll check out those links.
I do think I have heard what was probably packet bursts on the downlink side
from it.
Thanks.

"Doug McLaren" <dougmc@frenzy.com> wrote in message
news:6flGd.17178$Ta2.14353@fe2.texas.rr.com...
> In article <10ujlon37jsga28@corp.supernews.com>,
> Sarge <sarge43@NOSPAMev1.net> wrote:
>
> | I'd love to work some staellites or the space station. All I have is a
IC
> | 2100 and an FT5200 both on jpoles. Fm voice only. I want the kids to see
it
> | happen to peak their interest.
> | Right now I don't even hear anything from any of the sats. Are there any
> | that I can work with the set up I have?
>
> You could work the ISS easily enough -- just find a pass where it's as
> high in the sky as possible.
>
> http://heavens-above.com/ is quite useful in that regard. Be sure to
> log in and tell it your position. Then pick a good pass and see if
> you can hear it -- usually you can with even a HT, just turn the
> squelch all the way down.
>
> I haven't tried to work it in a while, but usually it's in packet
> mode, at least it was the last few times I tried. And when it is in
> voice mode, it's extremely busy. I'm guessing it'll be less busy if
> it's 4 am, but I haven't tried.
>
> http://www.rac.ca/ariss/faqariss.htm may help. I recall finding an
> even better FAQ out there somewhere, but can't seem to find it now.
>
> --
> Doug McLaren, dougmc@frenzy.com
> Consciousness: That annoying time between naps.

12. DSN : Error correction systems ?

Newsgroup: rec.radio.amateur.space
Date: 2005-01-16 11:59:17 UTC
From: Thierry <.>
Message-ID: <41ea571b$1@news.vo.lu>
Source record: 2226

Hi,

I am not a specialist of signal processing but I would like to find some recent documentation (after 2000-2002) about error correction systems used by the Deep Space network to exchange data with small and large spaceprobes (from Spirit to Huygens)
Document 'd deal with the various error corrections existing and how they work (not in depth and without too much maths...)
I think about EC code like shannon EC, forward EC, turbo code and more.

Why needs are to know which ones are used, why, in which conditions, their accuracy, etc.
There is not much information on DSN website (on general).
The more recent DSN progress reports are really old and do not discuss these questions (this is rather, we use EC code dot).

Any recent URL to suggest ?

Thanks in advance

Thierry, ON4SKY
http://www.astrosurf.com/lombry/qsl-mars-communication.htm

13. Re: Sats

Newsgroup: rec.radio.amateur.space
Date: 2005-01-16 12:09:01 UTC
From: Tom Randy <Sorry@spamsucks.net>
Message-ID: <pan.2005.01.16.12.17.25.704820@spamsucks.net>
Source record: 2227

On Sat, 15 Jan 2005 23:11:40 -0600, Sarge wrote:

> I don't have packet equipment, only fm voice. I'll check out those links.
> I do think I have heard what was probably packet bursts on the downlink side
> from it.
> Thanks.

You need LOTS of patients and persistance so keep at it and keep listening.
It took me a long time to get my Mir voice contact, packet was fairly easy.

14. Huygens and radio ?

Newsgroup: rec.radio.amateur.space
Date: 2005-01-16 13:16:55 UTC
From: Thierry <.>
Message-ID: <41ea694d$1@news.vo.lu>
Source record: 2228

Hi,

Does someone could tell me if Huygens spaceprobe transmit well its data to earth (via cassini) on X-band near 8 GHz ?

Then what is the mode used, one speak of modulation in "all or nothing" but I don't understand. Is it a sort of FM ?

Thanks

Thierry

15. Re: Sats

Newsgroup: rec.radio.amateur.space
Date: 2005-01-16 17:06:44 UTC
From: Sarge <sarge43@NOSPAMev1.net>
Message-ID: <10ul7p7neq8dfdf@corp.supernews.com>
Source record: 2229

OK thanks.... wish they would turn AO51 back on....

"Tom Randy" <Sorry@spamsucks.net> wrote in message
news:pan.2005.01.16.12.17.25.704820@spamsucks.net...
>> You need LOTS of patients and persistance so keep at it and keep
listening.
> It took me a long time to get my Mir voice contact, packet was fairly
easy.
>
>

16. Re: Huygens and radio ?

Newsgroup: rec.radio.amateur.space
Date: 2005-01-16 17:07:20 UTC
From: rocketeer <rocketeer@hotmail.com>
Message-ID: <_OOdnXd30e7UAnfcRVn-jA@comcast.com>
Source record: 2230

Thierry wrote:
> Hi,
>
> Does someone could tell me if Huygens spaceprobe transmit well its data to
> earth (via cassini) on X-band near 8 GHz ?
>
> Then what is the mode used, one speak of modulation in "all or nothing" but
> I don't understand. Is it a sort of FM ?
>
> Thanks
>
> Thierry
>
>
Might check out the Deep Space Network on NASA. Understand the only
"data" transmitted to earth from Huygens was a "carrier" to measure
Doppler shift for wind drift. Not sure what frequency that was on, but
was also received by the Deep Space Network. The science data and
images were sent to Cassini first then relayed to earth as Cassini had
to turn the high gain antenna away from Titan and beam to earth.
Kind of neat way of relay from such a distant place, amazing engineering
and cooperation by many countries and ESA and NASA and more.

I heard on NASA-TV yesterday the ESA communications manager said they
forgot to switch "channel A" to ON before it left Cassini, but thanks
to duplicate systems the data was sent to Cassini on channel B.

Would think the data is sent via FM but maybe SSB? Then packets sent
using pretty much the same type technology we use for packet, "data
modes" on the ham bands, but the data is transmitted much faster than
ham "data", and wide bandwidth, HI!

Listen to the "radar conversion" audio file (mp3), kind of neat:

http://www.esa.int/esaCP/SEM85Q71Y3E_index_0.html

But do not know the original format of the signal. Maybe
someone can enlighten us more?

rocketeer

17. Re: Sats

Newsgroup: rec.radio.amateur.space
Date: 2005-01-16 17:15:51 UTC
From: rocketeer <rocketeer@hotmail.com>
Message-ID: <CsGdnTDAz6rVPHfcRVn-uQ@comcast.com>
Source record: 2231

Sarge wrote:
> I'd love to work some staellites or the space station. All I have is a IC
> 2100 and an FT5200 both on jpoles. Fm voice only. I want the kids to see it
> happen to peak their interest.
> Right now I don't even hear anything from any of the sats. Are there any
> that I can work with the set up I have?
>
> Thanks so much,
> Sarge W5SRG
>
>
Sarge,
Check out the FM repeater on ISS for one, it is on two meters and
supposed to be easy to access even with a HT. Then AO-51 has a
FM repeater, but it is not always on the same mode. Check the
www.amsat.org site for information about what birds are active and what
frequency range they operate on. Might also look on the ARISS site and
see if the crew is going to have a voice contact with a school while it
is in your AOS range.
rocketeer

18. Re: DSN : Error correction systems ?

Newsgroup: rec.radio.amateur.space
Date: 2005-01-16 20:42:37 UTC
From: laura halliday <marsgal42@hotmail.com>
Message-ID: <1105908157.381233.29210@z14g2000cwz.googlegroups.com>
Source record: 2232

Try <http://www.ccsds.org>

The signal is BPSK with just enough residual carrier for receivers on Earth to track the Doppler. The FEC is a (255,223) Reed-Solomon inner code concatenated with a convolutional outer code (k=15, r=1/6 for Cassini), with six-way interleaving.

I found most of these numbers by typing "cassini reed solomon" in to Google. Google is your friend.

Remember too that Cassini was launched 7 years ago, and was designed years before that. It's hardly surprising that much of the information on the subject is from a while ago.

Laura Halliday VE7LDH "Que les nuages soient notre
Grid: CN89mg pied a terre..."
ICBM: 49 16.05 N 122 56.92 W - Hospital/Shafte

19. Re: Sats

Newsgroup: rec.radio.amateur.space
Date: 2005-01-16 21:00:49 UTC
From: Sarge <sarge43@NOSPAMev1.net>
Message-ID: <10ullg4csiho147@corp.supernews.com>
Source record: 2233

been trying to hit the ISS repeater with no luck. I've seen nothing about a pl tone but I'm wondering if there is one. AO51 is shut down right now for use in the tsunami deal (even though AMSAT says no one is using it so far). Is there maybe a simple sat antenna I could build for 2mtr & 70cm fm? I've not seen anything yet.
I can run 50watts on 70cm and 160 on 2mter but can not hit the ISS repeater... I don't even *hear* anyone using it. I used to hear them all the time. It goes right over quite often. I'm about 50 miles sw of houston and 30 miles west of NASA.

"rocketeer" <rocketeer@hotmail.com> wrote in message
> Sarge,
> Check out the FM repeater on ISS for one, it is on two meters and
> supposed to be easy to access even with a HT. Then AO-51 has a
> FM repeater, but it is not always on the same mode. Check the
> www.amsat.org site for information about what birds are active and what
> frequency range they operate on. Might also look on the ARISS site and
> see if the crew is going to have a voice contact with a school while it
> is in your AOS range.
> rocketeer

20. Re: Sats

Newsgroup: rec.radio.amateur.space
Date: 2005-01-17 02:44:41 UTC
From: rocketeer <rocketeer@hotmail.com>
Message-ID: <qrCdnWmtXrgGu3bcRVn-qQ@comcast.com>
Source record: 2234

Sarge wrote:
> been trying to hit the ISS repeater with no luck. I've seen nothing about a
> pl tone but I'm wondering if there is one. AO51 is shut down right now for
> use in the tsunami deal (even though AMSAT says no one is using it so far).
> Is there maybe a simple sat antenna I could build for 2mtr & 70cm fm? I've
> not seen anything yet.
> I can run 50watts on 70cm and 160 on 2mter but can not hit the ISS
> repeater... I don't even *hear* anyone using it. I used to hear them all
> the time. It goes right over quite often. I'm about 50 miles sw of houston
> and 30 miles west of NASA.

AMSAT: www.amsat.org site has the ISS in digipeat mode the last I
looked, do you hear any packet sounds when it passes over on 145.800?
Should be able to hit it with 15 watts and a ground plane antenna. Or
there is a 2 mtr/440 beam antenna:
http://www.m2inc.com/products/vhf/2m/2m5440xp.html
Had to move into a senior high rise over a year ago, no outside antennas
and I am on the 8th floor of a 13 story building, no balcony. Have a 2
meter 300 Ohm "J Pole" in one of my windows, but is not very good for
ISS, I hear some passes if it goes to the west of my window which is
on the west side of the building, but the signal is pretty weak.
rocketeer

21. Re: Sats

Newsgroup: rec.radio.amateur.space
Date: 2005-01-17 05:48:32 UTC
From: Sarge <sarge43@NOSPAMev1.net>
Message-ID: <10umkdhic2vui70@corp.supernews.com>
Source record: 2235

OK, what is digipeat mode? I do hear packet sounds from it, yes.
Can't make contact with them or use the 2m repeater it says it has.
I DID tonight hear people on downlink from SO41 and I could hear myself
coming through AO27 I think it was. 1st I've heard them at all.
I probably do need a better antenna for some of this stuff. Probably have to
build whatever it is. I REALLY want to contact the space station...hahaha!

"rocketeer" <rocketeer@hotmail.com> wrote in message >>
>
> AMSAT: www.amsat.org site has the ISS in digipeat mode the last I
> looked, do you hear any packet sounds when it passes over on 145.800?
> Should be able to hit it with 15 watts and a ground plane antenna. Or
> there is a 2 mtr/440 beam antenna:
> http://www.m2inc.com/products/vhf/2m/2m5440xp.html
> Had to move into a senior high rise over a year ago, no outside antennas
> and I am on the 8th floor of a 13 story building, no balcony. Have a 2
> meter 300 Ohm "J Pole" in one of my windows, but is not very good for
> ISS, I hear some passes if it goes to the west of my window which is
> on the west side of the building, but the signal is pretty weak.
> rocketeer
>

22. Re: Sats

Newsgroup: rec.radio.amateur.space
Date: 2005-01-18 00:04:34 UTC
From: Tom Randy <Sorry@spamsucks.net>
Message-ID: <pan.2005.01.18.00.04.06.971057@spamsucks.net>
Source record: 2236

On Sun, 16 Jan 2005 23:48:32 -0600, Sarge wrote:

> OK, what is digipeat mode? I do hear packet sounds from it, yes.
> Can't make contact with them or use the 2m repeater it says it has.
> I DID tonight hear people on downlink from SO41 and I could hear myself
> coming through AO27 I think it was. 1st I've heard them at all.
> I probably do need a better antenna for some of this stuff. Probably have to
> build whatever it is. I REALLY want to contact the space station...hahaha!

You can go into unproto mode and digipeat through the ISS packet tnc back
to the ground. For quickie contacts. It's actually quite fun.

23. Re: Sats

Newsgroup: rec.radio.amateur.space
Date: 2005-01-18 03:43:53 UTC
From: Sarge <sarge43@NOSPAMev1.net>
Message-ID: <10up1fpaqmlc32d@corp.supernews.com>
Source record: 2237

"Tom Randy" <Sorry@spamsucks.net> wrote in message >
> You can go into unproto mode and digipeat through the ISS packet tnc back
> to the ground. For quickie contacts. It's actually quite fun.

Oh.. well I have no packet stuff so I'll have to miss out on that.

24. test message rec.radio.amateur.space

Newsgroup: rec.radio.amateur.space
Date: 2005-01-18 10:01:09 UTC
From: bait@infosynaptics.com
Message-ID: <csimp5siu104@reader01.singnet.com.sg>
Source record: 2238

Just a quick test post for the sole purpose of spreading this email address.
Only some random garbage below. Nothing for you to see here, please move along :)

> lead pipe with wheel weights works out just right. The bits of
>
>>ducky wrote:
> are hardened quite a bit, and in fact I've heard that mixing
caster and have him make you 20 pounds of hard cast 10 gauge or 12 gauge
> melt--mixed oxides and carbonates of lead. DONT BREATHE THE DUST!
> is what hardens the lead, so larger shot seems to be softer.

>>>Thanks
> Something I've noticed, at least for Hornady ammunition, is that the antimony
Marcus D. Leech wrote:
>
yourself, look for scrap linotype. Or look for a commercial bullet
> to the top of the melt, and can be skimmed off before pouring.
> Using old lead tends to leave a lot of dross on the surface of the
>>
>>>I was going to order the lead ingots and make my own, but that seems like way too much
work.
>
>>
> zxcvbob wrote:
If you really want hard lead, and if you are willing to cast them
>>sporting goods stores -- especially if they cater to black powder hunters.
lead balls.
> mild steel that they use for clips on wheel weights will float
>
> content goes *down* with increasing shot size. The antimony

>>diameter, but either should work just fine. Check Cabela's, or other
>>Best regards,
Bob
>
>>Twelve gauge shotgun balls. I'm not sure if they are .69 or .73
>>
> I ended up using the smallest size shot, and recasting it into
>>Bob

>

> cylindrical media about 0.625" x 0.875".
really makes that much difference in a powder mill.
Musket balls are soft lead, but they are readily available if you know

> I had started out with lead pipe, but it's way too soft. Wheel weights
>>>Does anyone know of a good source for pre manufactured hardened lead media for ball milling?
to look for them. As mallable as lead is, I'm not sure the hardness
>

Hormel Trappitus
bait@infosynaptics.com

View Spam trap mailbox in real time: http://zipurl.org/4g0c3

25. FM Satellites

Newsgroup: rec.radio.amateur.space
Date: 2005-01-18 14:31:37 UTC
From: William Erhardt <erhardt@mt.net>
Message-ID: <seudnSkcyr1WgHDcRVn-1w@mt.net>
Source record: 2239

Howdy from Bill K7MT Helena, Mt.

We have noticed several stations calling CQ on the FM satellites AO-27
SO-50 and AO-51 and not responding to our calls.

Please listen on the down link before transmitting just as you would on any
other amateur mode. The down link is rather weak from these satellites and
you need a pretty good antenna and possibly a pre-amp to hear the signals.
Dopper shift if almost + 10 kcs when the sat is first visible to zero
doppler when directly overhead and almost - 10 kcs when satellite is going
away on 70 centimeters.

K5OE and VE6AB have web pages with homemade antennas for these FM and other
satellites. Look them up on qrz.com and their links are on the site.

Look forward to chatting with all of you on the FM satellites.

Cheers Bill K7MT

26. Re: Sats

Newsgroup: rec.radio.amateur.space
Date: 2005-01-18 16:12:18 UTC
From: rocketeer <rocketeer@hotmail.com>
Message-ID: <BNSdnTmhkfb-qHDcRVn-1g@comcast.com>
Source record: 2240

Sarge wrote:
> OK, what is digipeat mode? I do hear packet sounds from it, yes.
> Can't make contact with them or use the 2m repeater it says it has.
> I DID tonight hear people on downlink from SO41 and I could hear myself
> coming through AO27 I think it was. 1st I've heard them at all.
> I probably do need a better antenna for some of this stuff. Probably have to
> build whatever it is. I REALLY want to contact the space station...hahaha!

There are several sound card software that will do the packet to
digipeat through ISS, MixW 2.14 (shareware) Hamscope and AGWPE are
freeware. On AGWPE you do not need the "pro" version look for the
free download there, these can be searched on www.Google.com

On sending to ISS the format is the same as an APRS message,
Lat/Long and a short text message like Hello, Sarge in ****(town)
Short one line and takes less than a minute to send and if you do make
the digipeat you will see your call and RS0ISS-3* repeated back on your
screen.

See: http://web.usna.navy.mil/~bruninga/aprs.html

Also see: http://www.findu.com/cgi-bin/ariss/index.cgi
View the the calls that were digipeated are shown there for quite a
while so you see if you made the "list". Right click on any call on the
list and you can see more info and the "RAW" packet sent by ISS.

With the new equipment on ISS this is supposed to work better than the
old HT they used for a few years. Simple ground plane should work fine
and 15 - 20 watts. Beacon every two minutes in case of collision with
another station, you should be able to make it at least once.

Good luck,
rocketeer

27. Re: Sats

Newsgroup: rec.radio.amateur.space
Date: 2005-01-18 19:13:44 UTC
From: Sarge <sarge43@NOSPAMev1.net>
Message-ID: <10uqnv9s76hfp4d@corp.supernews.com>
Source record: 2241

great thanks! I'm gonna just listen for awhile until I can set up something.
I'll get that software. thanks a bunch, rocketeer!!

"rocketeer" <rocketeer@hotmail.com> wrote in message
news:BNSdnTmhkfb-qHDcRVn-1g@comcast.com...
> Sarge wrote:
> > OK, what is digipeat mode? I do hear packet sounds from it, yes.
> > Can't make contact with them or use the 2m repeater it says it has.
> > I DID tonight hear people on downlink from SO41 and I could hear myself
> > coming through AO27 I think it was. 1st I've heard them at all.
> > I probably do need a better antenna for some of this stuff. Probably
have to
> > build whatever it is. I REALLY want to contact the space
station...hahaha!
>
> There are several sound card software that will do the packet to
> digipeat through ISS, MixW 2.14 (shareware) Hamscope and AGWPE are
> freeware. On AGWPE you do not need the "pro" version look for the
> free download there, these can be searched on www.Google.com
>
> On sending to ISS the format is the same as an APRS message,
> Lat/Long and a short text message like Hello, Sarge in ****(town)
> Short one line and takes less than a minute to send and if you do make
> the digipeat you will see your call and RS0ISS-3* repeated back on your
> screen.
>
> See: http://web.usna.navy.mil/~bruninga/aprs.html
>
> Also see: http://www.findu.com/cgi-bin/ariss/index.cgi
> View the the calls that were digipeated are shown there for quite a
> while so you see if you made the "list". Right click on any call on the
> list and you can see more info and the "RAW" packet sent by ISS.
>
> With the new equipment on ISS this is supposed to work better than the
> old HT they used for a few years. Simple ground plane should work fine
> and 15 - 20 watts. Beacon every two minutes in case of collision with
> another station, you should be able to make it at least once.
>
> Good luck,
> rocketeer

28. Re: FM Satellites

Newsgroup: rec.radio.amateur.space
Date: 2005-01-18 19:18:31 UTC
From: Sarge <sarge43@NOSPAMev1.net>
Message-ID: <10uqo88u9mue83@corp.supernews.com>
Source record: 2242

Thanks Bill! I'm glad to hear that they sound weak to everyone. Makes me wonder though how they say you can work these from an ht.
I'll check the websires for the antenna plans. I've been trying to find some. I'm trying to find everything I can to read on this subject. I'll not transmit until I have a better set up and more understanding. I have not called cq but I did toss my callsign out a couple times. W5SRG
I was acting on sketchy info from a friend. hahaha!
Thanks so much for the info, Bill!
Sarge

"William Erhardt" <erhardt@mt.net> wrote in message news:seudnSkcyr1WgHDcRVn-1w@mt.net...
> Howdy from Bill K7MT Helena, Mt.
>
> We have noticed several stations calling CQ on the FM satellites AO-27
> SO-50 and AO-51 and not responding to our calls.
>
> Please listen on the down link before transmitting just as you would on any
> other amateur mode. The down link is rather weak from these satellites and
> you need a pretty good antenna and possibly a pre-amp to hear the signals.
> Dopper shift if almost + 10 kcs when the sat is first visible to zero
> doppler when directly overhead and almost - 10 kcs when satellite is going
> away on 70 centimeters.
>
> K5OE and VE6AB have web pages with homemade antennas for these FM and other
> satellites. Look them up on qrz.com and their links are on the site.
>
> Look forward to chatting with all of you on the FM satellites.
>
> Cheers Bill K7MT
>
>

29. ARLS001 Useful life of UO-22 satellite appears over

Newsgroup: rec.radio.amateur.space
Date: 2005-01-19 08:04:42 UTC
From: J S AUSTIN W8JSA / AAT3MN <W8JSA@EXIS.NET>
Message-ID: <41ee16ae$1_1@newsfeed.slurp.net>
Source record: 2243

SB SPACE @ ARL $ARLS001
ARLS001 Useful life of UO-22 satellite appears over

ZCZC AS01
QST de W1AW
Space Bulletin 001 ARLS001
>From ARRL Headquarters
Newington, CT January 19, 2005
To all radio amateurs

SB SPACE ARL ARLS001
ARLS001 Useful life of UO-22 satellite appears over

According to AMSAT-UK, the UO-22 satellite is not in good shape and its useful life may be over. The Surrey Satellite Technology Limited (SSTL) Ground Station control center has tried several times in recent weeks to reactivate the satellite, AMSAT-UK reports. The satellite did come back to life briefly following one attempt, but other tries have failed completely.

The SSTL ground control station may make further attempts to reactivate UO-22, ''but it seems unlikely that they will be completely successful.'' The cause of the satellite's failure is not known for certain, but SSTL believes it may be related either to the spacecraft's batteries or to the fact that the satellite is very hot due to orbital precession, which has generally put the spacecraft in full sunlight. The elevated temperature has been causing problems with the receivers as well as with the batteries.

Launched on July 17, 1991, UO-22 has served for many years as the 9600 baud store-and-forward satellite for the Amateur Radio packet radio worldwide SatGate service, which linked packet radio networks in many countries. AMSAT-NA reports UO-22 as ''non-operational.''

For further information on UO-22 contact Jim Heck, G3WGM, via email at, g3wgm@amsat.org.
NNNN
/EX

30. Can DirectTV-type satellite dishes be used for SETI?

Newsgroup: rec.radio.amateur.space
Date: 2005-01-19 09:17:52 UTC
From: rgregoryclark@yahoo.com
Message-ID: <1106126272.160248.294240@z14g2000cwz.googlegroups.com>
Source record: 2244
Cross-posted to: sci.astro.seti,sci.astro,rec.radio.amateur.space,sci.physics

I was interested to read this on the Seti League web site:

Parasitic SETI
Dear Dr. SETI:
As a Satellite dish owner and a strong interest in SETI, I was wondering if anything is available to allow the home satellite dish owner to 'search' when he is not watching TV. I do a bit of programing and would love to help make it so home dish owners could do this. Is it possible? What would it take? Does the dish have to follow a spot or can it sweep the sky from a fixed position? If this is possible it could add a million listeners to the system.

Bill T.

The Doctor Responds:
Absolutely, Bill! Parasitic SETI with a home satellite TV dish is not only feasilble, it's widely practiced. A second feedhorn and preamp assembly are mounted next to the C-band horn/LNB at the apex of the dish (see Figure 2 of this article). This assembly feeds the rest of a SETI system (see our online Tech Manual). You can then sweep out the sky, as described here. And yes, a million participants would be nice, but our goal is a more modest 5000 stations.

---
http://www.setileague.org/askdr/parasite.htm

I believe they are referring to the 6 ft. backyard type antennas, judging from the linked images on the page. But could the roof mounted DirectTV and Dish Network type antennas be used for SETI?
The mentioned extra equipment are an extra feedhorn and a preamplifier. The feedhorn can made cheaply but the preamp seems expensive. If these preamps were mass produced for this purpose could their per item cost be brought under $50?
I'm envisionig a government agency such as NSF, or a scientically interested billionaire, paying satellite TV companies to attach this extra equipment to their satellite dishes. Say $100 million is earmarked for the program. Then you would want the extra cost to be under $100 for each dish for say 1,000,000 subscribers. Judging from the diagram in the online Tech Manual linked to on the page, the other equipment should be doable by the equipment that comes with the satellite TV system. Computer processing would be done separately at a central location.
If you had a 1,000,000 of these .5 meter wide antennas it would have the detection sensitivy of a single antenna 500 meters wide.

Bob Clark

31. test

Newsgroup: rec.radio.amateur.space
Date: 2005-01-19 10:43:26 UTC
From: Adrian SP8AQK <szumiksp8aqk@poczta.onet.pl>
Message-ID: <csldka$e81$1@news.onet.pl>
Source record: 2245

[No readable article body recovered]

32. Re: Can DirectTV-type satellite dishes be used for SETI?

Newsgroup: rec.radio.amateur.space
Date: 2005-01-19 12:07:24 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <hcmdnUBM-vhY0HPcRVn-qw@bright.net>
Source record: 2246
Cross-posted to: sci.astro.seti,sci.astro,rec.radio.amateur.space,sci.physics

Now I'm confused. The thread title asks about DirecTV dishes, then in the post it is mentioned about sweeping the dish across the sky and the answerer mentions C Band. DirecTV dishes ordinarily are not set up to "sweep" across the sky, nor are they operating at C Band. So, is anybody using DirecTV dishes for SETI work? If old C Band stuff can be used for SETI listening, that would be great since (at least around me) there are many old C Band setups unused in yards these days. Many could probably be had for free to anyone who would be willing to removed the big old ugly beasts from back yards.

Scott
N0EDV

rgregoryclark@yahoo.com wrote:
> I was interested to read this on the Seti League web site:
>
> ____
> Parasitic SETI
> Dear Dr. SETI:
> As a Satellite dish owner and a strong interest in SETI, I was
> wondering if anything is available to allow the home satellite dish
> owner to 'search' when he is not watching TV. I do a bit of programing
> and would love to help make it so home dish owners could do this. Is it
> possible? What would it take? Does the dish have to follow a spot or
> can it sweep the sky from a fixed position? If this is possible it
> could add a million listeners to the system.
>
> Bill T.
>
> The Doctor Responds:
> Absolutely, Bill! Parasitic SETI with a home satellite TV dish is not
> only feasilble, it's widely practiced. A second feedhorn and preamp
> assembly are mounted next to the C-band horn/LNB at the apex of the
> dish (see Figure 2 of this article). This assembly feeds the rest of a
> SETI system (see our online Tech Manual). You can then sweep out the
> sky, as described here. And yes, a million participants would be nice,
> but our goal is a more modest 5000 stations.
> ____
> http://www.setileague.org/askdr/parasite.htm
>
> I believe they are referring to the 6 ft. backyard type antennas,
> judging from the linked images on the page. But could the roof mounted
> DirectTV and Dish Network type antennas be used for SETI?
> The mentioned extra equipment are an extra feedhorn and a

> preamplifier. The feedhorn can made cheaply but the preamp seems
> expensive. If these preamps were mass produced for this purpose could
> their per item cost be brought under $50?
> I'm envisionig a government agency such as NSF, or a scientically
> interested billionaire, paying satellite TV companies to attach this
> extra equipment to their satellite dishes. Say $100 million is
> earmarked for the program. Then you would want the extra cost to be
> under $100 for each dish for say 1,000,000 subscribers. Judging from
> the diagram in the online Tech Manual linked to on the page, the other
> equipment should be doable by the equipment that comes with the
> satellite TV system. Computer processing would be done separately at a
> central location.
> If you had a 1,000,000 of these .5 meter wide antennas it would have
> the detection sensitivy of a single antenna 500 meters wide.
> Bob Clark
>

33. Re: Can DirectTV-type satellite dishes be used for SETI?

Newsgroup: rec.radio.amateur.space
Date: 2005-01-19 13:19:47 UTC
From: Mark Dunn <markrhdunn@hotmail.com>
Message-ID: <357586F4ihg29U1@individual.net>
Source record: 2247
Cross-posted to: sci.astro.seti,sci.astro,rec.radio.amateur.space,sci.physics

Somebody's having a laugh, surely? A satellite dish is about a million times
smaller.
"Scott" <acepilot@bloomer.net> wrote in message
news:hcmdnUBM-vhY0HPcRVn-qw@bright.net...
> Now I'm confused. The thread title asks about DirecTV dishes, then in
> the post it is mentioned about sweeping the dish across the sky and the
> answerer mentions C Band. DirecTV dishes ordinarily are not set up to
> "sweep" across the sky, nor are they operating at C Band. So, is
> anybody using DirecTV dishes for SETI work? If old C Band stuff can be
> used for SETI listening, that would be great since (at least around me)
> there are many old C Band setups unused in yards these days. Many could
> probably be had for free to anyone who would be willing to removed the
> big old ugly beasts from back yards.
>
> Scott
> N0EDV
>
> rgregoryclark@yahoo.com wrote:
> > I was interested to read this on the Seti League web site:
> >
> > ____
> > Parasitic SETI
> > Dear Dr. SETI:
> > As a Satellite dish owner and a strong interest in SETI, I was
> > wondering if anything is available to allow the home satellite dish
> > owner to 'search' when he is not watching TV. I do a bit of programing
> > and would love to help make it so home dish owners could do this. Is it
> > possible? What would it take? Does the dish have to follow a spot or
> > can it sweep the sky from a fixed position? If this is possible it
> > could add a million listeners to the system.
> >
> > Bill T.
> >
> > The Doctor Responds:
> > Absolutely, Bill! Parasitic SETI with a home satellite TV dish is not
> > only feasilble, it's widely practiced. A second feedhorn and preamp
> > assembly are mounted next to the C-band horn/LNB at the apex of the
> > dish (see Figure 2 of this article). This assembly feeds the rest of a
> > SETI system (see our online Tech Manual). You can then sweep out the
> > sky, as described here. And yes, a million participants would be nice,
> > but our goal is a more modest 5000 stations.
> > ____
> > http://www.setileague.org/askdr/parasite.htm

> >
> > I believe they are referring to the 6 ft. backyard type antennas,
> > judging from the linked images on the page. But could the roof mounted
> > DirectTV and Dish Network type antennas be used for SETI?
> > The mentioned extra equipment are an extra feedhorn and a
> > preamplifier. The feedhorn can made cheaply but the preamp seems
> > expensive. If these preamps were mass produced for this purpose could
> > their per item cost be brought under $50?
> > I'm envisionig a government agency such as NSF, or a scientically
> > interested billionaire, paying satellite TV companies to attach this
> > extra equipment to their satellite dishes. Say $100 million is
> > earmarked for the program. Then you would want the extra cost to be
> > under $100 for each dish for say 1,000,000 subscribers. Judging from
> > the diagram in the online Tech Manual linked to on the page, the other
> > equipment should be doable by the equipment that comes with the
> > satellite TV system. Computer processing would be done separately at a
> > central location.
> > If you had a 1,000,000 of these .5 meter wide antennas it would have
> > the detection sensitivy of a single antenna 500 meters wide.
> > Bob Clark
> >

34. Re: Can DirectTV-type satellite dishes be used for SETI?

Newsgroup: rec.radio.amateur.space
Date: 2005-01-19 14:16:02 UTC
From: Androcles <dummy@dummy.net>
Message-ID: <CYtHd.4418$vC1.4191@fe3.news.blueyonder.co.uk>
Source record: 2248
Cross-posted to: sci.astro.seti,sci.astro,rec.radio.amateur.space,sci.physics

<rgregoryclark@yahoo.com> wrote in message
news:1106126272.160248.294240@z14g2000cwz.googlegroups.com...
>I was interested to read this on the Seti League web site:
>
> ____
> Parasitic SETI
> Dear Dr. SETI:
> As a Satellite dish owner and a strong interest in SETI, I was
> wondering if anything is available to allow the home satellite dish
> owner to 'search' when he is not watching TV. I do a bit of programing
> and would love to help make it so home dish owners could do this. Is
> it
> possible? What would it take? Does the dish have to follow a spot or
> can it sweep the sky from a fixed position? If this is possible it
> could add a million listeners to the system.
>
> Bill T.
>
> The Doctor Responds:
> Absolutely, Bill! Parasitic SETI with a home satellite TV dish is not
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> assembly are mounted next to the C-band horn/LNB at the apex of the
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> SETI system (see our online Tech Manual). You can then sweep out the
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> I believe they are referring to the 6 ft. backyard type antennas,
> judging from the linked images on the page. But could the roof mounted
> DirectTV and Dish Network type antennas be used for SETI?
> The mentioned extra equipment are an extra feedhorn and a
> preamplifier. The feedhorn can made cheaply but the preamp seems
> expensive. If these preamps were mass produced for this purpose could
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> I'm envisionig a government agency such as NSF, or a scientically
> interested billionaire, paying satellite TV companies to attach this
> extra equipment to their satellite dishes. Say $100 million is
> earmarked for the program. Then you would want the extra cost to be
> under $100 for each dish for say 1,000,000 subscribers. Judging from
> the diagram in the online Tech Manual linked to on the page, the other
> equipment should be doable by the equipment that comes with the

> satellite TV system. Computer processing would be done separately at a
> central location.
> If you had a 1,000,000 of these .5 meter wide antennas it would have
> the detection sensitivy of a single antenna 500 meters wide.
> Bob Clark
>

Since it is quite clear that a dish is used for highly directional
communication,
and SETII stands for Search for Extra Terrestrial INTELLIGENCE by
IDIOTS....

Androcles.

35. Re: Can DirectTV-type satellite dishes be used for SETI?

Newsgroup: rec.radio.amateur.space
Date: 2005-01-19 14:17:07 UTC
From: "Alfred A. Aburto Jr." <aburto@sbcglobal.net>
Message-ID: <41EE6C07.3080806@sbcglobal.net>
Source record: 2249
Cross-posted to: sci.astro.seti,sci.astro,rec.radio.amateur.space,sci.physics

> rgregoryclark@yahoo.com wrote:
> I was interested to read this on the Seti League web site:
>
> ____
> Parasitic SETI
> Dear Dr. SETI:
> As a Satellite dish owner and a strong interest in SETI, I was
> wondering if anything is available to allow the home satellite dish
> owner to 'search' when he is not watching TV. I do a bit of programing
> and would love to help make it so home dish owners could do this. Is it
> possible? What would it take? Does the dish have to follow a spot or
> can it sweep the sky from a fixed position? If this is possible it
> could add a million listeners to the system.
>
> Bill T.
>
> The Doctor Responds:
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> only feasilble, it's widely practiced. A second feedhorn and preamp
> assembly are mounted next to the C-band horn/LNB at the apex of the
> dish (see Figure 2 of this article). This assembly feeds the rest of a
> SETI system (see our online Tech Manual). You can then sweep out the
> sky, as described here. And yes, a million participants would be nice,
> but our goal is a more modest 5000 stations.
> ____
> http://www.setileague.org/askdr/parasite.htm
>
> I believe they are referring to the 6 ft. backyard type antennas,
> judging from the linked images on the page. But could the roof mounted
> DirectTV and Dish Network type antennas be used for SETI?

Sure, they'd work. The dishes are smaller (1 ft diameter or so) but the
same principles apply as for the larger dishes (8-12 ft).

The only thing is that you'd need to work at much higher frequencies.
You'd need to do SETI at the 12GHz band.
Al

> The mentioned extra equipment are an extra feedhorn and a
> preamplifier. The feedhorn can made cheaply but the preamp seems
> expensive. If these preamps were mass produced for this purpose could
> their per item cost be brought under $50?
> I'm envisionig a government agency such as NSF, or a scientically
> interested billionaire, paying satellite TV companies to attach this

> extra equipment to their satellite dishes. Say $100 million is
> earmarked for the program. Then you would want the extra cost to be
> under $100 for each dish for say 1,000,000 subscribers. Judging from
> the diagram in the online Tech Manual linked to on the page, the other
> equipment should be doable by the equipment that comes with the
> satellite TV system. Computer processing would be done separately at a
> central location.
> If you had a 1,000,000 of these .5 meter wide antennas it would have
> the detection sensitivy of a single antenna 500 meters wide.
> Bob Clark
>

36. Help with story line..

Newsgroup: rec.radio.amateur.space
Date: 2005-01-19 14:40:16 UTC
From: artbellfan <artbellfan8@yahoo.com>
Message-ID: <1106145616.092331.26000@c13g2000cwb.googlegroups.com>
Source record: 2299

Hello, I need a good story line...

Check my website to see my books on the paranormal:

http://www.shadowpeoplebooks.com

Hello Group! I am a new member and am interested in the paranormal.
Being an author, I am interested in hearing stories involving ufo's,
alternate dimensions, ghosts, shadow people and just about anything
that cannot be explained. If you have a story that you feel would make
a good plot for a book-please let me know.

If by chance you are looking for good reading material involving
paranormal subject matter, please follow the link below and take a look
at my books. Either way, I look forward to hearing from you.

Check my website to see my books on the paranormal:

http://www.shadowpeoplebooks.com
Thank you in advance for your cooperation!

37. Re: Can DirectTV-type satellite dishes be used for SETI?

Newsgroup: rec.radio.amateur.space
Date: 2005-01-19 15:59:54 UTC
From: Uncle Al <UncleAl0@hate.spam.net>
Message-ID: <41EE83FA.AF129A14@hate.spam.net>
Source record: 2300
Cross-posted to: sci.astro.seti,sci.astro,rec.radio.amateur.space,sci.physics

rgregoryclark@yahoo.com wrote:
>
> I was interested to read this on the Seti League web site:
>
> ____
> Parasitic SETI
> Dear Dr. SETI:
> As a Satellite dish owner and a strong interest in SETI, I was
> wondering if anything is available to allow the home satellite dish
> owner to 'search' when he is not watching TV. I do a bit of programing
> and would love to help make it so home dish owners could do this. Is it
> possible? What would it take? Does the dish have to follow a spot or
> can it sweep the sky from a fixed position? If this is possible it
> could add a million listeners to the system.
[snip]

1) What is the diameter of a home satellite dish? What is the
diameter of the Aricebo dish? Intercepted amplitude varies as the
square of that ratio.

2) What is the temperature of a home satellite dish amplifier?
What is the temperature of the Aricebo first amplifier?

--
Uncle Al
http://www.mazepath.com/uncleal/
(Toxic URL! Unsafe for children and most mammals)
http://www.mazepath.com/uncleal/qz.pdf

38. Re: Can DirectTV-type satellite dishes be used for SETI?

Newsgroup: rec.radio.amateur.space
Date: 2005-01-19 16:11:37 UTC
From: k3ym4st3r <k3ym4st3r@yahoo.com>
Message-ID: <1106151097.158262.300540@z14g2000cwz.googlegroups.com>
Source record: 2301
Cross-posted to: sci.astro.seti,sci.astro,rec.radio.amateur.space,sci.physics

a question, in order to use all the "civilian" dishes as an array they
should be placed in a predetermined shape right?

39. Re: Can DirectTV-type satellite dishes be used for SETI?

Newsgroup: rec.radio.amateur.space
Date: 2005-01-19 16:19:21 UTC
From: Aso Merapi <nospam@nospam.com>
Message-ID: <357fkuF4h23tlU1@individual.net>
Source record: 2302
Cross-posted to: sci.astro.seti,sci.astro,rec.radio.amateur.space,sci.physics

> > I believe they are referring to the 6 ft. backyard type antennas,
> > judging from the linked images on the page. But could the roof mounted
> > DirectTV and Dish Network type antennas be used for SETI?
>
> Sure, they'd work. The dishes are smaller (1 ft diameter or so) but the
> same principles apply as for the larger dishes (8-12 ft).
>
> The only thing is that you'd need to work at much higher frequencies.
> You'd need to do SETI at the 12GHz band.
> Al
>

only problem is the signal loss, the 1/(d^2) loss from alien planet to Earth
assuming you keep your antenna directly pointed at his for at least 15
min(rather difficult since neither know where the other is).

If he is 20 light years away, or about 1 E+13 miles away the signal loss is
about -400 dB (at C band)
What this means is that the alien will have to convert a small moon
completely into microwave energy pointed towards earth.
I doubt the aliens could get funding to do it, because they would have to
choose a direction to aim their 1/10 degree beam too.
Listening is the low cost EZ part.
If SETI was really serious they would be building a huge microwave
transmitter.

40. Re: Can DirectTV-type satellite dishes be used for SETI?

Newsgroup: rec.radio.amateur.space
Date: 2005-01-19 16:23:11 UTC
From: Aso Merapi <nospam@nospam.com>
Message-ID: <357frfF4h489pU1@individual.net>
Source record: 2303
Cross-posted to: sci.astro.seti,sci.astro,rec.radio.amateur.space,sci.physics

"k3ym4st3r" <k3ym4st3r@yahoo.com> wrote in message
news:1106151097.158262.300540@z14g2000cwz.googlegroups.com...
> a question, in order to use all the "civilian" dishes as an array they
> should be placed in a predetermined shape right?
>

no they have to be phased though.
So the received signal adds in phase from all the dishes.
That is what the big arrays do.

41. Re: Can DirectTV-type satellite dishes be used for SETI?

Newsgroup: rec.radio.amateur.space
Date: 2005-01-19 16:48:07 UTC
From: Martin Brown <|||newspam|||@nezumi.demon.co.uk>
Message-ID: <csm301$ua9$1@news6.svr.pol.co.uk>
Source record: 2304
Cross-posted to: sci.astro.seti,sci.astro,rec.radio.amateur.space,sci.physics

k3ym4st3r wrote:

> a question, in order to use all the "civilian" dishes as an array they
> should be placed in a predetermined shape right?

You can choose your shape and suffer the resulting sidelobes.

But you do have to determine and compensate for the baseline geometry to
within fractions of a wavelength. All the signals from the target must
add in phase if you are to get any benefit from using multiple aerials.
This is non trivial if you want to track a celestial object across the sky.

A large phased array at low frequencies discovered the first pulsar. You
will need a few acres of toy dishes dedicated to the task to stand any
chance at all. Try the sun and Jupiter instead - you should see them OK.

Regards,
Martin Brown

42. Re: Can DirectTV-type satellite dishes be used for SETI?

Newsgroup: rec.radio.amateur.space
Date: 2005-01-19 17:16:05 UTC
From: Paul Cardinale <pcardinale@volcanomail.com>
Message-ID: <1106154965.613364.173750@f14g2000cwb.googlegroups.com>
Source record: 2305
Cross-posted to: sci.astro.seti,sci.astro,rec.radio.amateur.space,sci.physics

rgregorycl...@yahoo.com wrote:
> I was interested to read this on the Seti League web site:
>
> ____
> Parasitic SETI
> Dear Dr. SETI:
> As a Satellite dish owner and a strong interest in SETI, I was
> wondering if anything is available to allow the home satellite dish
> owner to 'search' when he is not watching TV.

[snip]

Try doing some math:
Suppose the aliens are only 50 lt-yrs away, and they're broadcasting a
100Mhz signal with a 1MW transmitter. Calculate how many photons/sec
hit your dish. Is that enough to reconstruct an intelligible signal?
Paul Cardinale

43. Re: Can DirectTV-type satellite dishes be used for SETI?

Newsgroup: rec.radio.amateur.space
Date: 2005-01-19 18:43:13 UTC
From: nightbat <nightbat@home.ffni.com>
Message-ID: <41EEAA41.63962D61@home.ffni.com>
Source record: 2306
Cross-posted to: sci.astro.seti,sci.astro,rec.radio.amateur.space,sci.physics,alt.astronomy

nightbat wrote

Aso Merapi wrote:
>
> > > I believe they are referring to the 6 ft. backyard type antennas,
> > > judging from the linked images on the page. But could the roof mounted
> > > DirectTV and Dish Network type antennas be used for SETI?
> >
> > Sure, they'd work. The dishes are smaller (1 ft diameter or so) but the
> > same principles apply as for the larger dishes (8-12 ft).
> >
> > The only thing is that you'd need to work at much higher frequencies.
> > You'd need to do SETI at the 12GHz band.
> > Al
> >
>
> only problem is the signal loss, the 1/(d^2) loss from alien planet to Earth
> assuming you keep your antenna directly pointed at his for at least 15
> min(rather difficult since neither know where the other is).
>
> If he is 20 light years away, or about 1 E+13 miles away the signal loss is
> about -400 dB (at C band)
> What this means is that the alien will have to convert a small moon
> completely into microwave energy pointed towards earth.
> I doubt the aliens could get funding to do it, because they would have to
> choose a direction to aim their 1/10 degree beam too.
> Listening is the low cost EZ part.
> If SETI was really serious they would be building a huge microwave
> transmitter.

nightbat

That's about a little over hundred years too late, for Tesla was
building his mega communication tower but the bank interests tore it
down and sold it for pennies on the dollar. Anyway who needs towers or
large disks now to contact ET because now we have amazing net UFO pocket
detectors and arriving cosmic star folk Darla and crew?

the nightbat

44. Re: Can DirectTV-type satellite dishes be used for SETI?

Newsgroup: rec.radio.amateur.space
Date: 2005-01-19 21:50:59 UTC
From: david@djwhome.demon.co.uk
Message-ID: <T1106168990@djwhome.demon.co.uk>
Source record: 2307
Cross-posted to: sci.astro.seti,sci.astro,rec.radio.amateur.space,sci.physics

In article <1106154965.613364.173750@f14g2000cwb.googlegroups.com>,
Paul Cardinale <pcardinale@volcanomail.com> wrote:

> Try doing some math:
> Suppose the aliens are only 50 lt-yrs away, and they're broadcasting a
> 100Mhz signal with a 1MW transmitter. Calculate how many photons/sec
> hit your dish. Is that enough to reconstruct an intelligible signal?

Such a signal is almost certainly too weak for Arecibo.

However, it is not the photon count that matters; that will not be a problem,
but the sky and receiver noise [A].

For SETI@Home, you need 1GW at about 4 LY (as effective isotropic power)
and that is at a frequency where the sky noise is about 200 or 300
times less. The wavelength at 100MHz is incompatible with even domestic
C band dishes. Phoenix can do better.

Small dish SETI is possible, and given certain constraints can match
the performance of large dish SETI, in terms of volume of sky swept at
a given transmit effective radiated power per unit time. The advantages
it has is that it is economically possible to give simultaneous all sky
coverage (because the solid angle covered scales in the same way as the
gain) and the signal integration times in drift scan are more than 100
times those for Arecibo. If you do the maths, and especially if you
account for the fact that the effective diameters of Arecibo is more
like 100 feet, you should find you get close to break even, for signals
that have relatively short durations. All the strong signals we have
ever generated are short duration.

The sci.astro.seti FAQ gives link budgets for small dish SETI. It
doesn't go to the integration times that are really needed for break
even, but even with just 200 seconds, it suggests that a 12 foot dish
can detect Arecibo's transmit power at over 50 light years.

Incidentally, the sort of low noise pre-amplifier technology currently
used by SERENDIP/SETI@Home is available to amateurs for, in the region of,
US$ 100. The current, room temperature, system actually outperforms
the cryogenic ones that failed during the project.

[A] system noise temperatures of about 50K are achievable at 1.42GHz
(it's several 1000K at 100MHz, from the sky). That make the noise in
0.05Hz (a good SETI bandwidth) about 3.45E-16 ergs/s (sorry, my reference
book is mainly cgs, but the conversion factor is 1E-7). At 1.42GHz,
one photon is about 5.92E-17 ergs. Typically you use signal to noise
ratios of more than 10, to account for statistical variation in the

noise, so one is talking about 3.45E-15 ergs/s. The integration time for this bandwidth is about 20 seconds, so one has to exceed 6.90E-14 ergs. You are talking about 1,000 photons at 1.42 Ghz (regardless of the dish size) to produce a signal reliably detectable above the system noise. At 100MHz, you would need serveral million because each photon has 1/14.2 of the energy and the sky noise, noise will be several thousand K.

45. Re: Can DirectTV-type satellite dishes be used for SETI?

Newsgroup: rec.radio.amateur.space
Date: 2005-01-19 22:35:31 UTC
From: Uncle Al <UncleAl0@hate.spam.net>
Message-ID: <41EEE0B3.6E0ED937@hate.spam.net>
Source record: 2308
Cross-posted to: sci.astro.seti,sci.astro,rec.radio.amateur.space,sci.physics

k3ym4st3r wrote:
>
> a question, in order to use all the "civilian" dishes as an array they
> should be placed in a predetermined shape right?

Not necessarily. Information consists of intensity and phase. The
former comes from surface area, the latter from extent. Configure to
match your target. Your two big problems are

1) Phase synchronization. If you want a big interferometer you
need to have all inputs exactly ganged in time and space. Nasty for
large separations - even if you locally record and centrally
synchronize.

2) Thermal noise. The Aricebo first amplifier is a ruby maser
sitting in liquid helium. They wouldn't do it if they didn't have to
do it. Atoms in quartz at room temp typically jiggle 3% of their bond
lengths, and it is anisotropic movement in space. Atoms in a
signal-carrying wire or conduit likewise. Thermal noise (static)
swamps the input signal.

--
Uncle Al
http://www.mazepath.com/uncleal/
(Toxic URL! Unsafe for children and most mammals)
http://www.mazepath.com/uncleal/qz.pdf

46. Re: Can DirectTV-type satellite dishes be used for SETI?

Newsgroup: rec.radio.amateur.space
Date: 2005-01-20 07:35:53 UTC
From: david@djwhome.demon.co.uk
Message-ID: <T1106206543@djwhome.demon.co.uk>
Source record: 2309
Cross-posted to: sci.astro.seti,sci.astro,rec.radio.amateur.space,sci.physics

In article <41EEE0B3.6E0ED937@hate.spam.net>,
Uncle Al <UncleAl0@hate.spam.net> wrote:

> 1) Phase synchronization. If you want a big interferometer you

This and funding are problems. However, with C band dishes, as noted, about 100 unphased ones can give whole sky coverage and may outperform Arecibo for signals of around 20 minutes duration. Multiple beam phased arrays like the Allen telescope may shift the balance back to the professionals.

> 2) Thermal noise. The Aricebo first amplifier is a ruby maser
> sitting in liquid helium. They wouldn't do it if they didn't have to

The SERENDIP first amplifier is now a non-cryogenic semiconductor (HEMT, I seem to remember) device and these sell on the amateur market for around US$ 100. This is better than the original cryogenic amplifiers. You've failed to track technology.

> signal-carrying wire or conduit likewise. Thermal noise (static)
> swamps the input signal.

The atoms don't matter, it is the thermal energy in the counduction band electrons that matters. The nature of conductors is that there is very little thermal coupling between electrons and atoms. The electrons in modern low noise amplifiers (and in the feeder cables) are cooled by radiations into space.

Incidentally, modern C band amateur systems are more sensitive than the system that detected the Wow! event.

47. Re: Can DirectTV-type satellite dishes be used for SETI?

Newsgroup: rec.radio.amateur.space
Date: 2005-01-20 13:23:20 UTC
From: rgregoryclark@yahoo.com
Message-ID: <1106227400.489449.102950@c13g2000cwb.googlegroups.com>
Source record: 2310
Cross-posted to: sci.astro.seti,sci.astro,rec.radio.amateur.space,sci.physics

Thanks for the detailed response. Tell me what's wrong with this
argument about detectability posted to habitablezone.com :

Space Sciences
re: Sounded like a reasonable question to me
Posted by Robert Clark on 1/20/2005 5:16:35 AM

In Reply to: Sounded like a reasonable question to me posted by alcaray
on 1/19/2005 9:07:31 AM

We can get a rough estimate from the transmissions detected from the
Pioneer 10 spacecraft:

EARTH STRAINS TO HEAR PIONEER 10 SOME 7 BILLION MILES AWAY.
http://www.xs4all.nl/~carlkop/pioneer.html

The transmitter is 7.5 watts and the transmissions were detected using
NASA's 70 meter radio telescopes in its Deep Space Network. The
furthest detections occurred when Pioneer 10 was more than 10 billion
kilometers away (it recently stopped transmitting or the signal
strength dropped too low.)
Television broadcast stations send out transmissions at the megawatt
scale. So let's say an alien broadcast is a million times stronger than
the Pioneer 10 signal at transmission. The strength of a signal drops
by the square of the distance. So we could detect such a signal not a
million times further away than the Pioneer 10 signal, but only a
thousand times further away. So this signal could be detected 10
trillion kilometers away. This is the distance of 1 light-year!
If you wanted to be able to detect signals out to 10 ly, which includes
several stars, the signal strength would drop by a factor of 100, so
the collecting area would have to be 100 times as large, which means
the diameter of your telescope has to be 10 times as big. This gives it
a diameter of 700 meters. This is only twice as wide as the current
largest telescope the Arecibo radio telescope.
This is only a rough guess because we know the frequency Pioneer 10 is
transmitting on and we know what the signal is supposed to look like,
which is not the case with a supposed alien signal.

This link shows stars to within 30 ly:

The Closest Stars
http://www.dudeman.net/spacedog/const/close.shtml

One of these at 10.5 ly away is Epsilon Eridani. It was recently shown
to have an orbiting planet:

Epsilon Eridani.
http://www.solstation.com/stars/eps-erid.htm

Bob Clark

---

48. Re: Can DirectTV-type satellite dishes be used for SETI?

Newsgroup: rec.radio.amateur.space
Date: 2005-01-20 13:23:20 UTC
From: david@djwhome.demon.co.uk
Message-ID: <T1106257150@djwhome.demon.co.uk>
Source record: 2314
Cross-posted to: sci.astro.seti,sci.astro,rec.radio.amateur.space,sci.physics

In article <1106227400.489449.102950@c13g2000cwb.googlegroups.com>,
rgregoryclark@yahoo.com wrote:

> We can get a rough estimate from the transmissions detected from the
> Pioneer 10 spacecraft:

Please read the sci.astro.seti FAQ. It gives a lot of quantified ranges.
However also note that the SETI Institute believes that Allen array, which
has less effective area than Arecibo, will be able to detect nearby
TV carriers (probably because they can afford to look at a source for
much longer than they can do with Arecibo - a large time bandwidth
product - range doubles for each 16 times increase in observation time,
but volume covered doubles for every 4 times increase in observation
time).

> The transmitter is 7.5 watts and the transmissions were detected using

The effective transmit power will be a lot more than this because of
the high gain antenna. (Effective isotropic radiated power - EIRP.)
If the data in the sci.astro.seti FAQ is correct, the Pioneer frequency
is 2.295 GHz and the EIRP is 1.6 kW. I'm not sure if you were quoting
detectable or usable ranges (the latter being much less). Also Pioneer
is known to exist, so one can use detection thresholds much closer to
the noise.

> Television broadcast stations send out transmissions at the megawatt
> scale. So let's say an alien broadcast is a million times stronger than

Television is used in the popularisation of SETI, presumably because it
is a concept that the man in the street can understand, but at best only
the carriers are detectable, and even they are not strong compared with
signals we can and do produce. Recovering the programme content is
a fantasy.

The leakage signals we produce that have really significant reaches
(best part of 1,000 LY) are things like planetary radar (very narrowband
and over 20TW EIRP). These don't, unfortunately, produce repeatable signals.
They do produce the sort of 15 minute duration signals that are optimised
for low gain simultaneous all sky searches!

Unfortunately, the general population has an expectation of SETI that
far exceeds what the SETI professionals' expect. Much of this has been
discussed over and over on sci.astro.seti.

49. Re: Can DirectTV-type satellite dishes be used for SETI?

Newsgroup: rec.radio.amateur.space
Date: 2005-01-20 19:30:50 UTC
From: Uncle Al <UncleAl0@hate.spam.net>
Message-ID: <41F006EA.B2E5C744@hate.spam.net>
Source record: 2311
Cross-posted to: sci.astro.seti,sci.astro,rec.radio.amateur.space,sci.physics

David Woolley wrote:
>
> In article <41EEE0B3.6E0ED937@hate.spam.net>,
> Uncle Al <UncleAl0@hate.spam.net> wrote:
>
> > 1) Phase synchronization. If you want a big interferometer you
>
> This and funding are problems. However, with C band dishes, as noted,
> about 100 unphased ones can give whole sky coverage and may outperform
> Arecibo for signals of around 20 minutes duration. Multiple beam
> phased arrays like the Allen telescope may shift the balance back to
> the professionals.
>
> > 2) Thermal noise. The Aricebo first amplifier is a ruby maser
> > sitting in liquid helium. They wouldn't do it if they didn't have to
>
> The SERENDIP first amplifier is now a non-cryogenic semiconductor (HEMT,
> I seem to remember) device and these sell on the amateur market for
> around US$ 100. This is better than the original cryogenic amplifiers.
> You've failed to track technology.

KEWL! What does an organiker know?

(100 dishes) -> (100 amplifiers)($100/amplifer)= $10K. Not so bad as
long as nobody wants to watch TV.

> > signal-carrying wire or conduit likewise. Thermal noise (static)
> > swamps the input signal.
>
> The atoms don't matter, it is the thermal energy in the counduction band
> electrons that matters. The nature of conductors is that there is very
> little thermal coupling between electrons and atoms. The electrons in
> modern low noise amplifiers (and in the feeder cables) are cooled by
> radiations into space.
>
> Incidentally, modern C band amateur systems are more sensitive than the
> system that detected the Wow! event.

SETI to date has detected no presumptive hits within a 50+ lightyear
radius. Technological life is rare.

1) It may be intrinsically rare.

2) It may be culturally rare. Europe was that rare concidence -
weather, religion, clear glass, big balls - that moved out of its

cocoon to achieve sustainable heavy shit. China had it and lost it.
With ceramics but without clear glass, Chinese science stalled.
Philosophy plus bureaucracy doesn't build an Industrial Revolution.
Planets covered with subsistence agriculture and butterball priests
don't go anywhere interesting.

3) It may be transient. The First World will burn through physical
and social resources by 2050. Unless something drastically advances,
major upheaval and likely irreversible collapse is unavoidable. Ten
billon Third World animals will value life beneath all else and take
over. We'll never come back.

4) The necessary bit of sustaining knowledge may be lethally
difficult to discover or lethally expensive to engage.

5) We might be first in the neighborhood. It is then vital that we
grab it all and kill off any competition - what Europe did in the New
World and what we should do with the Third World.

--
Uncle Al
http://www.mazepath.com/uncleal/
(Toxic URL! Unsafe for children and most mammals)
http://www.mazepath.com/uncleal/qz.pdf

50. Re: FM Satellites

Newsgroup: rec.radio.amateur.space
Date: 2005-01-20 19:43:48 UTC
From: W2RAC <rcook31@cfl.rr.com>
Message-ID: <tr00v0homc7k98ek939cilcdcn7021b5m1@4ax.com>
Source record: 2312

I made a contact on AO-51 1-19-05 0305z with N1AFA.

BUT he is not in the callsign database.
I confirmed this from another ham who QSO'd with him earlier this
week.

ftp://207.36.195.130/pub/radioaudio011805.mp3

Is a 4.5mb file of the sat pass. You can here him and N7FMI (I think)
at the 4:58 minute mark. You can just here me call on the downlink
freq between N7FMI and N1AFA.

W2RAC
www.qsl.net/w2rac

On Tue, 18 Jan 2005 07:31:37 -0700, "William Erhardt" <erhardt@mt.net>
wrote:

>Howdy from Bill K7MT Helena, Mt.
>
>We have noticed several stations calling CQ on the FM satellites AO-27
>SO-50 and AO-51 and not responding to our calls.
>
>Please listen on the down link before transmitting just as you would on any
>other amateur mode. The down link is rather weak from these satellites and
>you need a pretty good antenna and possibly a pre-amp to hear the signals.
>Dopper shift if almost + 10 kcs when the sat is first visible to zero
>doppler when directly overhead and almost - 10 kcs when satellite is going
>away on 70 centimeters.
>
>K5OE and VE6AB have web pages with homemade antennas for these FM and other
>satellites. Look them up on qrz.com and their links are on the site.
>
>Look forward to chatting with all of you on the FM satellites.
>
>Cheers Bill K7MT
>

51. Re: Can DirectTV-type satellite dishes be used for SETI?

Newsgroup: rec.radio.amateur.space
Date: 2005-01-20 21:06:15 UTC
From: George Dishman <george@briar.demon.co.uk>
Message-ID: <csp6k9odm1@news.freedom2surf.net>
Source record: 2313
Cross-posted to: sci.astro.seti,sci.astro,rec.radio.amateur.space,sci.physics

<rgregoryclark@yahoo.com> wrote in message
news:1106227400.489449.102950@c13g2000cwb.googlegroups.com...
> Thanks for the detailed response. Tell me what's wrong with this
> argument about detectability posted to habitablezone.com :

One thing to consider is the bandwidth. Pioneer used a
transponder on the craft locked to a known uplink
frequency. You can get wide frequency coverage and
narrow-band detection using an FFT but the frequency
has to be stable, hence the need to search a range of
Doppler shift to compensate for the radial acceleration
of the source. Narrow band still means long integration
times and unless the aliens are targetting us, any
chance alignment is likely to sweep over our antenna in
a very short time. That relates to the beamwidth of the
transmitter which another consideration, a wider beam
(at their end) gives a longer period of illumination
but lower received power.

A third aspect is that you will only detect the carrier
this way, not modulation. For high power transmitters
it gives significant saving to use some form of
suppressed carrier scheme. Unles they are shining a CW
beacon at us to attract our attention (or they are very
stupid, highly advanced aliens), it is likely that only
a small fraction of the power would be in the carrier.

George

> _____
> Space Sciences
> re: Sounded like a reasonable question to me
> Posted by Robert Clark on 1/20/2005 5:16:35 AM
>
> In Reply to: Sounded like a reasonable question to me posted by alcaray
> on 1/19/2005 9:07:31 AM
>
> We can get a rough estimate from the transmissions detected from the
> Pioneer 10 spacecraft:
>
> EARTH STRAINS TO HEAR PIONEER 10 SOME 7 BILLION MILES AWAY.
> http://www.xs4all.nl/~carlkop/pioneer.html
>
> The transmitter is 7.5 watts and the transmissions were detected using

> NASA's 70 meter radio telescopes in its Deep Space Network. The
> furthest detections occurred when Pioneer 10 was more than 10 billion
> kilometers away (it recently stopped transmitting or the signal
> strength dropped too low.)
> Television broadcast stations send out transmissions at the megawatt
> scale. So let's say an alien broadcast is a million times stronger than
> the Pioneer 10 signal at transmission. The strength of a signal drops
> by the square of the distance. So we could detect such a signal not a
> million times further away than the Pioneer 10 signal, but only a
> thousand times further away. So this signal could be detected 10
> trillion kilometers away. This is the distance of 1 light-year!
> If you wanted to be able to detect signals out to 10 ly, which includes
> several stars, the signal strength would drop by a factor of 100, so
> the collecting area would have to be 100 times as large, which means
> the diameter of your telescope has to be 10 times as big. This gives it
> a diameter of 700 meters. This is only twice as wide as the current
> largest telescope the Arecibo radio telescope.
> This is only a rough guess because we know the frequency Pioneer 10 is
> transmitting on and we know what the signal is supposed to look like,
> which is not the case with a supposed alien signal.
>
> This link shows stars to within 30 ly:
>
> The Closest Stars
> http://www.dudeman.net/spacedog/const/close.shtml
>
> One of these at 10.5 ly away is Epsilon Eridani. It was recently shown
> to have an orbiting planet:
>
> Epsilon Eridani.
> http://www.solstation.com/stars/eps-erid.htm
>
>
> Bob Clark
> ----------
>

52. Re: Can DirectTV-type satellite dishes be used for SETI?

Newsgroup: rec.radio.amateur.space
Date: 2005-01-20 22:39:42 UTC
From: rgregoryclark@yahoo.com
Message-ID: <1106260782.697981.215390@c13g2000cwb.googlegroups.com>
Source record: 2315
Cross-posted to: sci.astro.seti,sci.astro,rec.radio.amateur.space,sci.physics

Thanks for info. A carrier-wave is a pure sine wave isn't it? Wouldn't
that be in indication of intelligent origin?

Bob Clark

David Woolley wrote:
> In article <1106227400.489449.102950@c13g2000cwb.googlegroups.com>,
> rgregoryclark@yahoo.com wrote:
>
> > We can get a rough estimate from the transmissions detected from
the
> > Pioneer 10 spacecraft:
>
> Please read the sci.astro.seti FAQ. It gives a lot of quantified
ranges.
> However also note that the SETI Institute believes that Allen array,
which
> has less effective area than Arecibo, will be able to detect nearby
> TV carriers (probably because they can afford to look at a source for
> much longer than they can do with Arecibo - a large time bandwidth
> product - range doubles for each 16 times increase in observation
time,
> but volume covered doubles for every 4 times increase in observation
> time).
>
> > The transmitter is 7.5 watts and the transmissions were detected
using
>
> The effective transmit power will be a lot more than this because of
> the high gain antenna. (Effective isotropic radiated power - EIRP.)
> If the data in the sci.astro.seti FAQ is correct, the Pioneer
frequency
> is 2.295 GHz and the EIRP is 1.6 kW. I'm not sure if you were
quoting
> detectable or usable ranges (the latter being much less). Also
Pioneer
> is known to exist, so one can use detection thresholds much closer to
> the noise.
>
> > Television broadcast stations send out transmissions at the
megawatt
> > scale. So let's say an alien broadcast is a million times stronger
than
>

> Television is used in the popularisation of SETI, presumably because
it
> is a concept that the man in the street can understand, but at best
only
> the carriers are detectable, and even they are not strong compared
with
> signals we can and do produce. Recovering the programme content is
> a fantasy.
>
> The leakage signals we produce that have really significant reaches
> (best part of 1,000 LY) are things like planetary radar (very
narrowband
> and over 20TW EIRP). These don't, unfortunately, produce repeatable
signals.
> They do produce the sort of 15 minute duration signals that are
optimised
> for low gain simultaneous all sky searches!
>
> Unfortunately, the general population has an expectation of SETI that
> far exceeds what the SETI professionals' expect. Much of this has
been
> discussed over and over on sci.astro.seti.

53. Re: FM Satellites

Newsgroup: rec.radio.amateur.space
Date: 2005-01-21 04:52:35 UTC
From: Sarge <sarge43@NOSPAMev1.net>
Message-ID: <10v12koplfm7b36@corp.supernews.com>
Source record: 2316

That call sign sounds familiar. Anything to do with the air force at the Pentagon?

"W2RAC" <rcook31@cfl.rr.com> wrote in message news:tr00v0homc7k98ek939cilcdcn7021b5m1@4ax.com...
> I made a contact on AO-51 1-19-05 0305z with N1AFA.
>
> BUT he is not in the callsign database.
> I confirmed this from another ham who QSO'd with him earlier this
> week.
>
> ftp://207.36.195.130/pub/radioaudio011805.mp3
>
> Is a 4.5mb file of the sat pass. You can here him and N7FMI (I think)
> at the 4:58 minute mark. You can just here me call on the downlink
> freq between N7FMI and N1AFA.
>
> W2RAC
> www.qsl.net/w2rac
>
>
>
>
> On Tue, 18 Jan 2005 07:31:37 -0700, "William Erhardt" <erhardt@mt.net>
> wrote:
>
> >Howdy from Bill K7MT Helena, Mt.
> >
> >We have noticed several stations calling CQ on the FM satellites AO-27
> >SO-50 and AO-51 and not responding to our calls.
> >
> >Please listen on the down link before transmitting just as you would on
any
> >other amateur mode. The down link is rather weak from these satellites
and
> >you need a pretty good antenna and possibly a pre-amp to hear the
signals.
> >Dopper shift if almost + 10 kcs when the sat is first visible to zero
> >doppler when directly overhead and almost - 10 kcs when satellite is
going
> >away on 70 centimeters.
> >
> >K5OE and VE6AB have web pages with homemade antennas for these FM and
other

> >satellites. Look them up on qrz.com and their links are on the site.
> >
> >Look forward to chatting with all of you on the FM satellites.
> >
> >Cheers Bill K7MT
> >
>

54. Re: FM Satellites

Newsgroup: rec.radio.amateur.space
Date: 2005-01-21 15:58:37 UTC
From: mikea@mikea.ath.cx
Message-ID: <csr8rd$47o$1@puck.litech.org>
Source record: 2317

W2RAC <rcook31@cfl.rr.com> wrote:
> I made a contact on AO-51 1-19-05 0305z with N1AFA.

> BUT he is not in the callsign database.
> I confirmed this from another ham who QSO'd with him earlier this
> week.

> ftp://207.36.195.130/pub/radioaudio011805.mp3

> Is a 4.5mb file of the sat pass. You can here him and N7FMI (I think)
> at the 4:58 minute mark. You can just here me call on the downlink
> freq between N7FMI and N1AFA.

> W2RAC
> www.qsl.net/w2rac

This N1AFA:

(From http://wireless2.fcc.gov/UlsApp/UlsSearch/license.jsp?licKey=640964)

Call Sign N1AFA Radio Service HA - Amateur
Status Canceled Auth Type Regular
Dates
Grant 03/31/1992 Expiration 03/31/2002
Effective 06/03/2000 Cancellation 06/23/2000

?

--
Mike Andrews, KE5DMQ
mikea@mikea.ath.cx
Tired old sysadmin

55. Re: Can DirectTV-type satellite dishes be used for SETI?

Newsgroup: rec.radio.amateur.space
Date: 2005-01-21 21:54:50 UTC
From: david@djwhome.demon.co.uk
Message-ID: <T1106344535@djwhome.demon.co.uk>
Source record: 2322
Cross-posted to: sci.astro.seti,sci.astro,rec.radio.amateur.space,sci.physics

In article <1106260782.697981.215390@c13g2000cwb.googlegroups.com>,
rgregoryclark@yahoo.com wrote:

> Thanks for info. A carrier-wave is a pure sine wave isn't it? Wouldn't
> that be in indication of intelligent origin?

That's generally what the SETI literature means when they say they are
searching for narrow band signals. Being narrowband is the primary
indicator of intelligence for most current SETI searches, but in
itself it doesn't exclude human sources.

However, a sine wave is only a carrier if there is also modulation
present, so you will never see a pure carrier (you may see a beacon
that is a pure sine wave and you may see planetary radar like that).
Old technology, particularly AM broadcast, actually results in most of
the power going into the carrier and the rest being spread in frequency,
so it is possible to detect signals that are less than 1 Hz wide with
a lot of power. Modern technology puts very little carrier frequency
power into the signal.

The received signal will be distorted in by noise and propagation
disturbances, and chirped by the relative acceleration between the sender
and receiver (a SETI beacon may well be compensated to an inertial frame,
for the intended transmission direction, though).

In many detection scenarios, the signal will be modulated by the
beam patterns of sending or receiving antennas.

56. Re: Can DirectTV-type satellite dishes be used for SETI?

Newsgroup: rec.radio.amateur.space
Date: 2005-01-22 01:46:34 UTC
From: Tom <noname@noprovider.nodomain>
Message-ID: <_fiId.11773$HT6.11490@trnddc04>
Source record: 2318
Cross-posted to: sci.astro.seti,sci.astro,rec.radio.amateur.space,sci.physics

The article appears to be referring to C-band (4 Ghz) satelite dishes.
Much SETI work occurs near 1.4 GHz, which is a frequency
at which earth's atmosphere has very low attenuation (it's been nicknamed
the 'water hole'). One of the smallish DirecTV type dishes, which
is designed for Ku bnad (12 GHz) reception is going to be far too
small to be effective down in the 1+ GHz range. It is probably too
small even to be effectively illuminated by any kind of feed horn
in that range. Thus, it would not make a very good antenna at the
most useful SETI frequencies.

-- Tom

<rgregoryclark@yahoo.com> wrote in message
news:1106126272.160248.294240@z14g2000cwz.googlegroups.com...
>I was interested to read this on the Seti League web site:
>
> ____
> Parasitic SETI
> Dear Dr. SETI:
> As a Satellite dish owner and a strong interest in SETI, I was
> wondering if anything is available to allow the home satellite dish
> owner to 'search' when he is not watching TV. I do a bit of programing
> and would love to help make it so home dish owners could do this. Is it
> possible? What would it take? Does the dish have to follow a spot or
> can it sweep the sky from a fixed position? If this is possible it
> could add a million listeners to the system.
>
> Bill T.
>
> The Doctor Responds:
> Absolutely, Bill! Parasitic SETI with a home satellite TV dish is not
> only feasilble, it's widely practiced. A second feedhorn and preamp
> assembly are mounted next to the C-band horn/LNB at the apex of the
> dish (see Figure 2 of this article). This assembly feeds the rest of a
> SETI system (see our online Tech Manual). You can then sweep out the
> sky, as described here. And yes, a million participants would be nice,
> but our goal is a more modest 5000 stations.
> ____
> http://www.setileague.org/askdr/parasite.htm
>
> I believe they are referring to the 6 ft. backyard type antennas,
> judging from the linked images on the page. But could the roof mounted
> DirectTV and Dish Network type antennas be used for SETI?
> The mentioned extra equipment are an extra feedhorn and a

> preamplifier. The feedhorn can made cheaply but the preamp seems
> expensive. If these preamps were mass produced for this purpose could
> their per item cost be brought under $50?
> I'm envisionig a government agency such as NSF, or a scientically
> interested billionaire, paying satellite TV companies to attach this
> extra equipment to their satellite dishes. Say $100 million is
> earmarked for the program. Then you would want the extra cost to be
> under $100 for each dish for say 1,000,000 subscribers. Judging from
> the diagram in the online Tech Manual linked to on the page, the other
> equipment should be doable by the equipment that comes with the
> satellite TV system. Computer processing would be done separately at a
> central location.
> If you had a 1,000,000 of these .5 meter wide antennas it would have
> the detection sensitivy of a single antenna 500 meters wide.
> Bob Clark
>

57. Re: Can DirectTV-type satellite dishes be used for SETI?

Newsgroup: rec.radio.amateur.space
Date: 2005-01-22 03:58:09 UTC
From: "Alfred A. Aburto Jr." <aburto@sbcglobal.net>
Message-ID: <41F1CF97.6000904@sbcglobal.net>
Source record: 2319
Cross-posted to: sci.astro.seti,sci.astro,rec.radio.amateur.space,sci.physics

> Tom wrote:
> The article appears to be referring to C-band (4 Ghz) satelite dishes.
> Much SETI work occurs near 1.4 GHz, which is a frequency
> at which earth's atmosphere has very low attenuation (it's been nicknamed
> the 'water hole'). One of the smallish DirecTV type dishes, which
> is designed for Ku bnad (12 GHz) reception is going to be far too
> small to be effective down in the 1+ GHz range. It is probably too
> small even to be effectively illuminated by any kind of feed horn
> in that range. Thus, it would not make a very good antenna at the
> most useful SETI frequencies.
>
> -- Tom
>

But if you work SETI at 12GHz then the 18inch (~0.5m) dish antenna will
have a beamwidth (theoretical beamwidth) of about 3 degrees. This is
just slightly bigger than the 2.5 degree beamwidth expected from a 5m
dish antenna working at 1420.406MHz!

So, if one works SETI at the higher frequency (12000MHz) then the
performance will be entirely adequate for amateur SETI.
Al

[snip]

58. Re: Can DirectTV-type satellite dishes be used for SETI?

Newsgroup: rec.radio.amateur.space
Date: 2005-01-22 04:06:50 UTC
From: Rob Dekker <rob@verific.com>
Message-ID: <ujkId.14013$5R.5011@newssvr21.news.prodigy.com>
Source record: 2320
Cross-posted to: sci.astro.seti,sci.astro,rec.radio.amateur.space,sci.physics

<rgregoryclark@yahoo.com> wrote in message
news:1106260782.697981.215390@c13g2000cwb.googlegroups.com...
> Thanks for info. A carrier-wave is a pure sine wave isn't it? Wouldn't
> that be in indication of intelligent origin?
>

Yes. A carrier is a pure sine wave (very, very narrowband), and
Yes, this would be an indication of artificial (intelligent) origin.

Nature's most narrowband signals (certain masers) are wider than 300Hz bandwidth,
so carriers will stand out from natural signals.

Problem with carriers is that they are actually a 'waste' of energy, since they
contain no information. So the assumption is that carriers have a limited lifetime
in a technologically advancing civilisation. For us, since we are moving away from
analog and to digital transmissions (where carriers are not really needed), the
lifetime of carriers for communication applications is almost reached, and was
thus about 100 years.

This realization has triggered some news articles in the past month that
"Earth is disappearing from the radar screen", which was readily picked up by
SETI critics that there is no use to continue SETI. This is a somewhat strange
conclusion, since SETI was so-far focused on finding intended signals (beacons)
as opposed to unintended (TV/radio/radar) signals, and also because it only applies to
communication signal technology.

Other applications (such as the planetary radar that David mentioned) and
also SETI beacons, are much more likely to continue to use carriers (CW signals),
even for much more advanced technologies, since their narrow bandwidth character
by itself is very advantageous for sensitivity.
So technological lifetime for carrier signals can still be much longer than lifetime
of only analog TV.

Rob

59. Re: FM Satellites

Newsgroup: rec.radio.amateur.space
Date: 2005-01-22 07:08:43 UTC
From: Sarge <sarge43@NOSPAMev1.net>
Message-ID: <10v3v024lunav86@corp.supernews.com>
Source record: 2321

well someone should have their ass burned.

> This N1AFA:
>
> (From http://wireless2.fcc.gov/UlsApp/UlsSearch/license.jsp?licKey=640964)
>
> Call Sign N1AFA Radio Service HA - Amateur
> Status Canceled Auth Type Regular
> Dates
> Grant 03/31/1992 Expiration 03/31/2002
> Effective 06/03/2000 Cancellation 06/23/2000
>
> ?
>
> --
> Mike Andrews, KE5DMQ
> mikea@mikea.ath.cx
> Tired old sysadmin

60. Re: Can DirectTV-type satellite dishes be used for SETI?

Newsgroup: rec.radio.amateur.space
Date: 2005-01-22 08:31:49 UTC
From: david@djwhome.demon.co.uk
Message-ID: <T1106386806@djwhome.demon.co.uk>
Source record: 2323
Cross-posted to: sci.astro.seti,sci.astro,rec.radio.amateur.space,sci.physics

In article <41F1CF97.6000904@sbcglobal.net>,
Alfred A. Aburto Jr. <aburto@sbcglobal.net> wrote:
> > Tom wrote:
> > The article appears to be referring to C-band (4 Ghz) satelite dishes.
> > Much SETI work occurs near 1.4 GHz, which is a frequency
> > at which earth's atmosphere has very low attenuation (it's been nicknamed

It's also very low attenuation at 12GHz. In fact, the low attenuation
of the atmosphere extends from about 0 to 20GHz. The ionosphere limits
the lower bound to around 30MHz. The effective lower bound for SETI is,
however, set by galactic synchrotron radiation, at around 1GHz. 1.4GHz
has a significant excess of noise, so is not at the bottom of the waterhole.

> > the 'water hole'). One of the smallish DirecTV type dishes, which

The low noise/low attenuation waterhole is from about 1GHz to about 20GHz.

The reason that 1.4GHz is used is that, given that you have limited
resources, where should you concentrate them. 1.4GHz is used because
it is a critical frequency for radio astronomy (mapping insterstellar
hydrogen) which means radio astronomers in the whole universe are likely
to observer it and there is a lot of equipment already optimised for
that frequency at radio telescopes. 'Waterhole', in this context,
is a metaphor based on where do you look for wild animals.

There is a third definition of waterhole, based on trying to restrict to
a limited range based on radio astronomy. This is from the hydrogen
hyperfine line at around 1.4GHz to a group of hydroxyl ion lines at
around 1.6GHz.

> > is designed for Ku bnad (12 GHz) reception is going to be far too
> > small to be effective down in the 1+ GHz range. It is probably too

It is too small, but there are aguments for going to considerably
higher frequencies than 1.4GHz. E.g. our planetary radar is at
about 2.3GHz and the frequency where frequency spreading by the
insterstellar medium is lowest is even higher. I think that in
Carl Sagan's "Contact" story, he used pi * (hydrogen hyerfine) as
the first detection frequency.

Some SETI is done at optical frequencies.

> But if you work SETI at 12GHz then the 18inch (~0.5m) dish antenna will
> have a beamwidth (theoretical beamwidth) of about 3 degrees. This is ...

> So, if one works SETI at the higher frequency (12000MHz) then the
> performance will be entirely adequate for amateur SETI.

The sensitivity depends on the capture area. You would need a larger transmit gain to compensate. Using the same transmit aperture as for 1.4GHz would be enough to compensate.

61. antenna

Newsgroup: rec.radio.amateur.space
Date: 2005-01-22 10:23:08 UTC
From: Sarge <sarge43@NOSPAMev1.net>
Message-ID: <10v4acfm2lbuhd0@corp.supernews.com>
Source record: 2324

anyone have some detailed instructions on a 2meter and 70cm satellite antenna? Something easy to build that is omni-directional?

Thanks

62. Re: antenna

Newsgroup: rec.radio.amateur.space
Date: 2005-01-22 12:37:30 UTC
From: Richard Frodage <frodage@frod.net>
Message-ID: <pan.2005.01.22.12.45.55.952551@frod.net>
Source record: 2325

On Sat, 22 Jan 2005 04:23:08 -0600, Sarge wrote:

> anyone have some detailed instructions on a 2meter and 70cm satellite
> antenna? Something easy to build that is omni-directional?
>
> Thanks

Google is your friend....

63. Re: Can DirectTV-type satellite dishes be used for SETI?

Newsgroup: rec.radio.amateur.space
Date: 2005-01-22 13:23:00 UTC
From: Motuwojjal <mowwarka.wiollie@bounretyon.com>
Message-ID: <UssId.129527$K7.4738@news-server.bigpond.net.au>
Source record: 2326
Cross-posted to: sci.astro.seti,sci.astro,rec.radio.amateur.space,sci.physics

<rgregoryclark@yahoo.com> wrote in message
news:1106126272.160248.294240@z14g2000cwz.googlegroups.com...
>I was interested to read this on the Seti League web site:
>
> ____
> Parasitic SETI
> Dear Dr. SETI:
> As a Satellite dish owner and a strong interest in SETI, I was
> wondering if anything is available to allow the home satellite dish
> owner to 'search' when he is not watching TV. I do a bit of
> programing
> and would love to help make it so home dish owners could do this. Is
> it
> possible? What would it take? Does the dish have to follow a spot or
> can it sweep the sky from a fixed position? If this is possible it
> could add a million listeners to the system.
>
> Bill T.
>
> The Doctor Responds:
> Absolutely, Bill! Parasitic SETI with a home satellite TV dish is
> not
> only feasilble, it's widely practiced. A second feedhorn and preamp
> assembly are mounted next to the C-band horn/LNB at the apex of the
> dish (see Figure 2 of this article). This assembly feeds the rest of
> a
> SETI system (see our online Tech Manual). You can then sweep out the
> sky, as described here. And yes, a million participants would be
> nice,
> but our goal is a more modest 5000 stations.
> ____
> http://www.setileague.org/askdr/parasite.htm
>
> I believe they are referring to the 6 ft. backyard type antennas,
> judging from the linked images on the page. But could the roof
> mounted
> DirectTV and Dish Network type antennas be used for SETI?
> The mentioned extra equipment are an extra feedhorn and a
> preamplifier. The feedhorn can made cheaply but the preamp seems
> expensive. If these preamps were mass produced for this purpose
> could
> their per item cost be brought under $50?
> I'm envisionig a government agency such as NSF, or a scientically

> interested billionaire, paying satellite TV companies to attach this
> extra equipment to their satellite dishes. Say $100 million is
> earmarked for the program. Then you would want the extra cost to be
> under $100 for each dish for say 1,000,000 subscribers. Judging from
> the diagram in the online Tech Manual linked to on the page, the
> other
> equipment should be doable by the equipment that comes with the
> satellite TV system. Computer processing would be done separately at
> a
> central location.
> If you had a 1,000,000 of these .5 meter wide antennas it would have
> the detection sensitivy of a single antenna 500 meters wide.
> Bob Clark

Apart from the technical aspects, there's also a logistics problem.
Who is going to coordinate who will scan what segments & when they'll
do it.

64. Re: antenna

Newsgroup: rec.radio.amateur.space
Date: 2005-01-22 15:15:44 UTC
From: James - KG4PBI <JAHarrison@Surry.net>
Message-ID: <cstqmvvnk1@news3.infoave.net>
Source record: 2327

Check yahoo or googel for K5OE, he has some good ones I started out with
before going to my M2 beams.

73 James KG4PBI

"Sarge" <sarge43@NOSPAMev1.net> wrote in message
news:10v4acfm2lbuhd0@corp.supernews.com...
> anyone have some detailed instructions on a 2meter and 70cm satellite
> antenna? Something easy to build that is omni-directional?
>
> Thanks
>
>

65. Re: antenna

Newsgroup: rec.radio.amateur.space
Date: 2005-01-22 18:49:18 UTC
From: Sarge <sarge43@NOSPAMev1.net>
Message-ID: <10v581ht2k0mm3d@corp.supernews.com>
Source record: 2328

"James - KG4PBI" <JAHarrison@Surry.net> wrote in message
news:cstqmvvnk1@news3.infoave.net...
> Check yahoo or googel for K5OE, he has some good ones I started out with
> before going to my M2 beams.

K5OE , ok thanks.

66. Re: Can DirectTV-type satellite dishes be used for SETI?

Newsgroup: rec.radio.amateur.space
Date: 2005-01-22 19:44:34 UTC
From: Dan Mckenna <dmckenna@as.arizona.edu>
Message-ID: <d2yId.13208$nt.3530@fed1read06>
Source record: 2329
Cross-posted to: sci.astro.seti,sci.astro,rec.radio.amateur.space,sci.physics

Rob Dekker wrote:
> <rgregoryclark@yahoo.com> wrote in message
news:1106260782.697981.215390@c13g2000cwb.googlegroups.com...
>
>>Thanks for info. A carrier-wave is a pure sine wave isn't it? Wouldn't
>>that be in indication of intelligent origin?
>>

A carrier, if transmitted from the surface of a planet would have very
useful information if it was continuous:

1) rotation rate of planet
2) orbital velocity of planet around star

If you could see the parent star then you would know the spectral type
and distance to the star. This would let us know the orbit, distance
from the star and based on the spectral type, the stellar flux from the
star at the surface of the planet.

These parameters would go a long way to understanding the distribution
of life in the galaxy.

I would think.

Dan

It's only a hobby
>
>
> Yes. A carrier is a pure sine wave (very, very narrowband), and
> Yes, this would be an indication of artificial (intelligent) origin.
>
> Nature's most narrowband signals (certain masers) are wider than 300Hz bandwidth,
> so carriers will stand out from natural signals.
>
> Problem with carriers is that they are actually a 'waste' of energy, since they
> contain no information. So the assumption is that carriers have a limited lifetime
> in a technologically advancing civilisation. For us, since we are moving away from
> analog and to digital transmissions (where carriers are not really needed), the
> lifetime of carriers for communication applications is almost reached, and was
> thus about 100 years.

67. Re: antenna

Newsgroup: rec.radio.amateur.space
Date: 2005-01-23 12:44:43 UTC
From: Dennis Kaylor <k4oxg@tampabay.rr.com>
Message-ID: <%_MId.258276$6w6.247788@tornado.tampabay.rr.com>
Source record: 2330

check out this site he has lots of info
http://members.aol.com/k5oe/

Sarge wrote:
> anyone have some detailed instructions on a 2meter and 70cm satellite
> antenna? Something easy to build that is omni-directional?
>
> Thanks
>
>

68. Re: antenna

Newsgroup: rec.radio.amateur.space
Date: 2005-01-23 21:26:46 UTC
From: Sarge <sarge43@NOSPAMev1.net>
Message-ID: <10v85kq6sg1oma7@corp.supernews.com>
Source record: 2331

"Dennis Kaylor" <k4oxg@tampabay.rr.com> wrote in message
news:%_MId.258276$6w6.247788@tornado.tampabay.rr.com...
> check out this site he has lots of info
> http://members.aol.com/k5oe/

eggbeater II looks good.

69. Re: antenna

Newsgroup: rec.radio.amateur.space
Date: 2005-01-23 21:33:15 UTC
From: Sarge <sarge43@NOSPAMev1.net>
Message-ID: <10v860vqbbk7q40@corp.supernews.com>
Source record: 2332

OK I asked the question wrong. I meant does anyone have a favorite that they use or have experience with that is easy to put together.
Google has a lot of info but no practical experience. I'm looking for more of an Elmer type advice for this.
Anyway the eggbeater II looks easy and I guess it works ok.

"Richard Frodage" <frodage@frod.net> wrote in message news:pan.2005.01.22.12.45.55.952551@frod.net...
> On Sat, 22 Jan 2005 04:23:08 -0600, Sarge wrote:
>
>
> Google is your friend....

70. Re: FM Satellites

Newsgroup: rec.radio.amateur.space
Date: 2005-01-24 15:20:30 UTC
From: W2RAC <rcook31@cfl.rr.com>
Message-ID: <ic4av0tkq0lie8e2toa5u2pgmh969iddka@4ax.com>
Source record: 2333

Looks like with some investagating he is actually N1ASA.
I got the grid square, and ASA fits the bill!

Moral of the story, use phonetics!!!!

On Thu, 20 Jan 2005 19:43:48 GMT, W2RAC <rcook31@cfl.rr.com> wrote:

>I made a contact on AO-51 1-19-05 0305z with N1AFA.
>
>BUT he is not in the callsign database.
>I confirmed this from another ham who QSO'd with him earlier this
>week.
>
>ftp://207.36.195.130/pub/radioaudio011805.mp3
>
>Is a 4.5mb file of the sat pass. You can here him and N7FMI (I think)
>at the 4:58 minute mark. You can just here me call on the downlink
>freq between N7FMI and N1AFA.
>
>W2RAC
>www.qsl.net/w2rac
>
>
>
>
>On Tue, 18 Jan 2005 07:31:37 -0700, "William Erhardt" <erhardt@mt.net>
>wrote:
>
>>Howdy from Bill K7MT Helena, Mt.
>>
>>We have noticed several stations calling CQ on the FM satellites AO-27
>>SO-50 and AO-51 and not responding to our calls.
>>
>>Please listen on the down link before transmitting just as you would on any
>>other amateur mode. The down link is rather weak from these satellites and
>>you need a pretty good antenna and possibly a pre-amp to hear the signals.
>>Dopper shift if almost + 10 kcs when the sat is first visible to zero
>>doppler when directly overhead and almost - 10 kcs when satellite is going
>>away on 70 centimeters.
>>
>>K5OE and VE6AB have web pages with homemade antennas for these FM and other
>>satellites. Look them up on qrz.com and their links are on the site.
>>
>>Look forward to chatting with all of you on the FM satellites.
>>

>>Cheers Bill K7MT
>>

71. Re: Can DirectTV-type satellite dishes be used for SETI?

Newsgroup: rec.radio.amateur.space
Date: 2005-01-24 23:07:30 UTC
From: Rob Dekker <rob@verific.com>
Message-ID: <ScfJd.15200$5R.8648@newssvr21.news.prodigy.com>
Source record: 2334
Cross-posted to: sci.astro.seti,sci.astro,rec.radio.amateur.space,sci.physics

"Motuwojjal" <mowwarka.wiollie@bounretyon.com> wrote in message
news:UssId.129527$K7.4738@news-server.bigpond.net.au...
[...]
> > If you had a 1,000,000 of these .5 meter wide antennas it would have
> > the detection sensitivy of a single antenna 500 meters wide.
> > Bob Clark
>
>
> Apart from the technical aspects, there's also a logistics problem.
> Who is going to coordinate who will scan what segments & when they'll
> do it.
>

Not to mention the logistics of information transfer :

To transmit even a moderate 1GHz bandwidth (from the 12GHz band) to the
coordinator, each dish would need to have at least a 1Gbps data connection.
Scanning a much smaller bandwidth would greatly diminish usability for the array.

Some fiber-optic cable would do, but most people don't need satellite TV any more
if they have a fiber-optic cable coming into their house.

>

72. Re: antenna

Newsgroup: rec.radio.amateur.space
Date: 2005-01-25 14:58:08 UTC
From: rocketeer <rocketeer@hotmail.com>
Message-ID: <Qs-dncCej74fw2vcRVn-gA@comcast.com>
Source record: 2335

Sarge wrote:
> OK I asked the question wrong. I meant does anyone have a favorite that they
> use or have experience with that is easy to put together.
> Google has a lot of info but no practical experience. I'm looking for more
> of an Elmer type advice for this.
> Anyway the eggbeater II looks easy and I guess it works ok.
>
>
> "Richard Frodage" <frodage@frod.net> wrote in message
> news:pan.2005.01.22.12.45.55.952551@frod.net...
>
>>On Sat, 22 Jan 2005 04:23:08 -0600, Sarge wrote:
>>
>>
>>Google is your friend....
>
>
>
Try a Commercial 5/8 wave mobile two meter magnetic mount antenna,
Diamond, Larsen, or other make mounted on a "cookie sheet". Don't have
to make anything antenna, mount, and coax all supplied. Worked great
for me for ISS contacts.
rocketeer

73. Re: antenna

Newsgroup: rec.radio.amateur.space
Date: 2005-01-25 23:37:25 UTC
From: "Vince Fiscus, KB7ADL" <vlfiscus.xyz@mcn.net>
Message-ID: <VKAJd.5419$YD5.228@newsread3.news.pas.earthlink.net>
Source record: 2336

"Sarge" <sarge43@NOSPAMev1.net> wrote in
news:10v860vqbbk7q40@corp.supernews.com:

> OK I asked the question wrong. I meant does anyone have a favorite that
> they use or have experience with that is easy to put together.
> Google has a lot of info but no practical experience. I'm looking for
> more of an Elmer type advice for this.
> Anyway the eggbeater II looks easy and I guess it works ok.
>
>
> "Richard Frodage" <frodage@frod.net> wrote in message
> news:pan.2005.01.22.12.45.55.952551@frod.net...
>> On Sat, 22 Jan 2005 04:23:08 -0600, Sarge wrote:
>>
>>
>> Google is your friend....

I have 2 & 70 cm eggbeaters. They work, but I've found better LEO
performance with just a simple 2/70 vertical colinear ground plane.
Cushcraft has the arx-2/70 I believe, but look around.

For best performance and maximum satellite enjoyment, put up a set of
rotatable high gain circular polarized beams. They'll come in handy if the
Amsat-NA Board of Directors ever really commit themselves to the idea of
building another Phase III type satellite, and you'll be already to go when
they do.

KB7ADL

74. Re: antenna

Newsgroup: rec.radio.amateur.space
Date: 2005-01-27 20:29:13 UTC
From: Sarge <sarge43@NOSPAMev1.net>
Message-ID: <10vfvcpolv9mr9e@corp.supernews.com>
Source record: 2337

I was gonna build the eggbeater II but maybe my two Jpoles will work just as well. haha! The beams you speak of are probably great but may be a bit involved for me. I may give it a shot though.
Thanks!

"Vince Fiscus, KB7ADL" <vlfiscus.xyz@mcn.net> wrote in message news:VKAJd.5419$YD5.228@newsread3.news.pas.earthlink.net...
>
> I have 2 & 70 cm eggbeaters. They work, but I've found better LEO
> performance with just a simple 2/70 vertical colinear ground plane.
> Cushcraft has the arx-2/70 I believe, but look around.
>
> For best performance and maximum satellite enjoyment, put up a set of
> rotatable high gain circular polarized beams. They'll come in handy if
the
> Amsat-NA Board of Directors ever really commit themselves to the idea of
> building another Phase III type satellite, and you'll be already to go
when
> they do.
>
> KB7ADL
>

75. Re: antenna

Newsgroup: rec.radio.amateur.space
Date: 2005-01-27 20:31:20 UTC
From: Sarge <sarge43@NOSPAMev1.net>
Message-ID: <10vfvgpbpm3tf28@corp.supernews.com>
Source record: 2338

Voice contacts or packet? I never hear them on voice anymore and someone
told me that since 9-11 they have cut ham contacts back to scheduled school
contacts only. may or may not be true. I do hear packet signals from the ISS
very strong.

"rocketeer" <rocketeer@hotmail.com> wrote in message
news:Qs-dncCej74fw2vcRVn-gA@comcast.com...
> Sarge wrote:
> > OK I asked the question wrong. I meant does anyone have a favorite that
they
> > use or have experience with that is easy to put together.
> > Google has a lot of info but no practical experience. I'm looking for
more
> > of an Elmer type advice for this.
> > Anyway the eggbeater II looks easy and I guess it works ok.
> >
> >
> > "Richard Frodage" <frodage@frod.net> wrote in message
> > news:pan.2005.01.22.12.45.55.952551@frod.net...
> >
> >>On Sat, 22 Jan 2005 04:23:08 -0600, Sarge wrote:
> >>
> >>
> >>Google is your friend....
> >>
> >>
> >>
> >>
> Try a Commercial 5/8 wave mobile two meter magnetic mount antenna,
> Diamond, Larsen, or other make mounted on a "cookie sheet". Don't have
> to make anything antenna, mount, and coax all supplied. Worked great
> for me for ISS contacts.
> rocketeer
>

76. Re: radiosonde receiver recommendation needed

Newsgroup: rec.radio.amateur.space
Date: 2005-01-28 15:49:55 UTC
From: Seawards <craigwoods@telkomsa.net>
Message-ID: <d336fe11e5b84e37d82b97f82f90cc9a@localhost.talkaboutradio.com>
Source record: 2339

Just to deviate slightly. I have an Icom 8500 and a Vaisala RS80 Radiosonde that transmits on 403mhz. I would like to know how to decode the data especially from the onboard GPS module. Then maybe we can use the radiosonde either in our BACAR(balloon carrying amateur radio)or in a foxhunt. Any information gratefully accepted.Craig.

77. FS wesat antenna noaa

Newsgroup: rec.radio.amateur.space
Date: 2005-01-28 23:20:24 UTC
From: none <notme@home.com>
Message-ID: <YMzKd.90401$kq2.82452@twister.nyc.rr.com>
Source record: 2340

```
WESAT NOAA turnstile antenna for sale
ebay Item number: 5747798079
--
------------------------------------------------------------
"Your never really alone with a schizophrenic."
An unknown comedian.

.
```

78. iss qso wed 2feb 1254z on echolink

Newsgroup: rec.radio.amateur.space
Date: 2005-01-29 08:34:49 UTC
From: g3zhi@hotmail.com
Message-ID: <41fb4a77.3107803@news.btinternet.com>
Source record: 2341

iss qso wed 2feb 1254z on echolink
Enter text for message, end with Ctrl-Z or /EX on a blank line :
iss qso wed 2nd feb 2005 1254 utc

i will relay this qso in the amsat conference room at 1254utc
anyone in europe can also listen direct to the iss on the downlink
frequency 145.800 fm the qso should last about 10mins

73 ian

http://www.qsl.net/g3zhi

1132 Air Training Corps Squadron (Stalham), Norwich Norfolk England
direct via
GB2ATC.
Contact is a go for Wed 2005-02-02 12:54 UTC 67 deg

Proposed questions for the Air Training Corps:
1. How did you celebrate new years eve?
2. How do you sleep and when?
3. Where you able to see the Tsunami disaster?
4. Who inspired you to become an astronaut?
5. Who were your roll models from space exploration?
6. Which are the largest man man object you can see?
7. What is your favourite experience in space to date?
8. Did you ever want to do anything other than be an astronaut?
9. What do you eat in space and what does it taste like?
10. What is the biggest object you can see over Britain?
11. What type of drinks do you have aboard?
12. What is your favourite view from space?
13. What do you do in your spare time?
14. What tests are you doing at present?
15. What TV can you watch in space?
16. When are you due to arrive back on earth?
17. Would you like to visit another planet?
18. What time zone do you observe in space?
19. What is your height at the moment?
20. What speed are you traveling?

73 Ian G3ZHI

http://www.qsl.net/g3zhi - many ham radio links

http://www.ukirlp.co.uk

G4NJI IRLP 5200 Echolink 135909
Rotherham simplex 145.2875mhz

GB3XN IRLP 5708 Echolink 153126
Langold 430.925 Mhz

Mobile 0783 338 0578

79. Re: radiosonde receiver recommendation needed

Newsgroup: rec.radio.amateur.space
Date: 2005-01-29 15:56:30 UTC
From: Dan Mckenna <dmckenna@as.arizona.edu>
Message-ID: <jmOKd.797$1O2.580@fed1read05>
Source record: 2342

Craig,

http://www.qsl.net/dl3gaz/decoder/

Is the location of a RS80 decoder site.

I have a few of the RS80 radiosondes and they seem to be the
Wide band version compared to the ones launched by the weather service
that are narrow band and transmit at 1680 Mhz

The RS80 that I have has a loran antenna woven into the line that ties
to the launch train.

The GPS version does not have a on board "GPS engine". It transmits the
raw pseudo ranges and requires processing in the base station to get
position.

you can power the RS80 with a 9 V battery and hear the telemetry
at 408 or so.

Dan

Seawards wrote:
> Just to deviate slightly. I have an Icom 8500 and a Vaisala RS80 Radiosonde
> that transmits on 403mhz. I would like to know how to decode the data
> especially from the onboard GPS module. Then maybe we can use the
> radiosonde either in our BACAR(balloon carrying amateur radio)or in a
> foxhunt. Any information gratefully accepted.Craig.
>

80. Re: iss qso wed 2feb 1254z on echolink

Newsgroup: rec.radio.amateur.space
Date: 2005-01-29 18:47:19 UTC
From: James Nipper <jnipper@nospam.fdn.com>
Message-ID: <kLKdnTk4rLnZR2bcRVn-sw@comcast.com>
Source record: 2343

If you were on Echolink, you were not in contact with ISS. You were in contact with the internet.

73 de Jim K4PYT

81. Re: iss qso wed 2feb 1254z on echolink

Newsgroup: rec.radio.amateur.space
Date: 2005-01-29 19:21:36 UTC
From: dontspam <dontspam@worldnet.att.net>
Message-ID: <bhonv0p1omqhp36qruk609ipu8hiksmagd@4ax.com>
Source record: 2344

Echolink is a Joke.

On Sat, 29 Jan 2005 13:47:19 -0500, "James Nipper"
<jnipper@nospam.fdn.com> wrote:

>If you were on Echolink, you were not in contact with ISS. You were in
>contact with the internet.
>
>
>73 de Jim K4PYT

82. Re: iss qso wed 2feb 1254z on echolink

Newsgroup: rec.radio.amateur.space
Date: 2005-01-29 20:35:22 UTC
From: Tom Randy <Sorry@spamsucks.net>
Message-ID: <pan.2005.01.29.20.42.05.82434@spamsucks.net>
Source record: 2345

On Sat, 29 Jan 2005 13:47:19 -0500, James Nipper wrote:

> If you were on Echolink, you were not in contact with ISS. You were in
> contact with the internet.
>
>
> 73 de Jim K4PYT

Agreed 100%.

83. Re: iss qso wed 2feb 1254z on echolink

Newsgroup: rec.radio.amateur.space
Date: 2005-01-29 20:36:27 UTC
From: Tom Randy <Sorry@spamsucks.net>
Message-ID: <pan.2005.01.29.20.43.10.579853@spamsucks.net>
Source record: 2346

On Sat, 29 Jan 2005 19:21:36 +0000, dontspam wrote:

> Echolink is a Joke.

I don't quite get the attraction myself. Using the internet to make
contacts you can't make over the airwaves?????

They can have it....

Tom

84. Re: antenna

Newsgroup: rec.radio.amateur.space
Date: 2005-01-29 21:27:21 UTC
From: William Erhardt <erhardt@mt.net>
Message-ID: <S5ednaBg-M9WYmbcRVn-qQ@mt.net>
Source record: 2347

Howdy from Bill K7MT,

Look up K5OE on QRZ and there is a link to Jerry's page for home made satellite antenna's using #10 romex house wire. I have two in operation here in Montana and they work great.

Cheers Bill K7MT

85. Re: iss qso wed 2feb 1254z on echolink

Newsgroup: rec.radio.amateur.space
Date: 2005-01-29 21:51:06 UTC
From: dontspam <dontspam@worldnet.att.net>
Message-ID: <u91ov052038gmsdfqiph0es5dnkjlttduh@4ax.com>
Source record: 2348

I agree

On Sat, 29 Jan 2005 20:36:27 GMT, Tom Randy <Sorry@spamsucks.net>
wrote:

>On Sat, 29 Jan 2005 19:21:36 +0000, dontspam wrote:
>
>> Echolink is a Joke.
>
>
>I don't quite get the attraction myself. Using the internet to make
>contacts you can't make over the airwaves?????
>
>They can have it....
>
>Tom

86. Re: iss qso wed 2feb 1254z on echolink

Newsgroup: rec.radio.amateur.space
Date: 2005-01-30 14:52:40 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <04Cdndt4uZhtaWHcRVn-3Q@bright.net>
Source record: 2150

Well, I'll throw in my nickle's worth. Echolink is pretty nice when a sysop has their repeater hooked to it. Last winter we drove from WI to AZ and back. On the way back, I was able to connect up with our home repeater, through echolink, while we were leaving Denver to get a weather report from home. There was a raging snowstorm and I was able to determine if we should brave it or make another stop and delay the trip home by a day to let it pass. All this while we were on the road. Sure, I could have stopped and found someplace to tune in the weather channel, but this was more convenient and I got a more accurate description of the weather "right at home". I do not log contacts I make over Echolink. Echolink does have one other nice feature...For roundtable discussions, it's great. It's pretty hard to pick a band that will allow communications to all locations at once.

Scott
N0EDV

Tom Randy wrote:
> On Sat, 29 Jan 2005 19:21:36 +0000, dontspam wrote:
>
>
>>Echolink is a Joke.
>
>
>
> I don't quite get the attraction myself. Using the internet to make
> contacts you can't make over the airwaves?????
>
> They can have it....
>
> Tom
>

87. Re: iss qso wed 2feb 1254z on echolink

Newsgroup: rec.radio.amateur.space
Date: 2005-01-30 15:01:44 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <tJqdnbJzhlWNamHcRVn-oQ@bright.net>
Source record: 2151

EXACTLY! Using it to make contacts you CAN'T make over the airwaves. Great for skeds, roundtables, etc. Never a worry about propagation and cheaper than the phone. It's a very nice VoIP application. If you have ham relatives scattered around the country, why not IP them and keep all the mushy stuff private and off the air? ;)

Echolink is just another tool, not a replacement for radio. It's just a blending of radio and computer. Just like using the internet for DX spotting. Or email to set up a sked with a buddy. You're already using a computer in the shack, why is voice over the internet so alien and objectionable? Have you ever used packet? That's about the opposite of echolink--using radio to relay data.

I'll bet the old timers said the same thing about satellite communications..."Why use a satellite repeater when you can use 160M or 75M?"

Scott
N0EDV

dontspam wrote:

> I agree
>
>
>
> On Sat, 29 Jan 2005 20:36:27 GMT, Tom Randy <Sorry@spamsucks.net>
> wrote:
>
>
>>On Sat, 29 Jan 2005 19:21:36 +0000, dontspam wrote:
>>
>>
>>>Echolink is a Joke.
>>
>>
>>I don't quite get the attraction myself. Using the internet to make
>>contacts you can't make over the airwaves?????
>>
>>They can have it....
>>
>>Tom
>
>

88. Re: iss qso wed 2feb 1254z on echolink

Newsgroup: rec.radio.amateur.space
Date: 2005-01-30 17:26:48 UTC
From: rocketeer <rocketeer@hotmail.com>
Message-ID: <J8mdnYf3RYIEhWDcRVn-ug@comcast.com>
Source record: 2152

g3zhi wrote:
> iss qso wed 2feb 1254z on echolink
> Enter text for message, end with Ctrl-Z or /EX on a blank line :
> iss qso wed 2nd feb 2005 1254 utc
>
> i will relay this qso in the amsat conference room at 1254utc
> anyone in europe can also listen direct to the iss on the downlink
> frequency 145.800 fm the qso should last about 10mins
>
> 73 ian

I think what your trying to accomplish via Echolink could be done direct? Won't there be some hams there that may have a portable ISS/Satellite setup? If it is a real AMSAT conference it should be direct via ISS not Echolink? Have seen this done at Hamfests and satellite seminars regularly!

rocketeer

89. Re: iss qso wed 2feb 1254z on echolink

Newsgroup: rec.radio.amateur.space
Date: 2005-01-31 01:28:59 UTC
From: James Nipper <jnipper@nospam.fdn.com>
Message-ID: <bJKdnc8RC_x5FGDcRVn-hg@comcast.com>
Source record: 2153

You could have accomplished the very same thing with a cellphone, no ham license, and less hassle.

--James--

Well, I'll throw in my nickle's worth. Echolink is pretty nice when a sysop has their repeater hooked to it. Last winter we drove from WI to AZ and back. On the way back, I was able to connect up with our home repeater, through echolink, while we were leaving Denver to get a weather report from home. There was a raging snowstorm and I was able to determine if we should brave it or make another stop and delay the trip home by a day to let it pass. All this while we were on the road. Sure, I could have stopped and found someplace to tune in the weather channel, but this was more convenient and I got a more accurate description of the weather "right at home". I do not log contacts I make over Echolink. Echolink does have one other nice feature...For roundtable discussions, it's great. It's pretty hard to pick a band that will allow communications to all locations at once.

90. Satscape and Labjack

Newsgroup: rec.radio.amateur.space
Date: 2005-01-31 05:11:59 UTC
From: Dennis Kaylor <k4oxg@tampabay.rr.com>
Message-ID: <z6jLd.11622$Q72.9596@tornado.tampabay.rr.com>
Source record: 2154

hello all
i was on NLSA.Com website and i saw their ad for the Labjack and
labjack piggyback to control the yaesu G5400 rotor
thinking that most controllers are compatable with most softwares i
bought the labjack and piggyback cause they where cheap $150 compared to
the nearly $300 for the autotrac and a couple others
now i find the labjack will only work with Nova for windows and i really
dislike that software i perfer Satscape the maps are better the user
interface is better and easier to move around and it gives you better
info on the satellite of your choise
now Satscape uses WISPDDE to control rotor and rig control
i have emailed the writer of this software and he is to busy to add
another interface to the software
so i was wondering
1) if anyone else is using the Labjack/piggyback to control their rotors
2) if anyone has found a way to get WISPDDE to work with said controller
3) anyone have a controller that works with WISPDDE and runs off a USB
port or serial port they would like to sell
i would even be interested in the autotracker if the price is right
i want to automate my station i just want to be able to click on a
satellite and have the rotor and rig turn to the correct places so all i
need to do is key the mic
HELP
thanks

91. Re: iss qso wed 2feb 1254z on echolink

Newsgroup: rec.radio.amateur.space
Date: 2005-01-31 11:48:27 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <op6dnX21_sjfhmPcRVn-vw@bright.net>
Source record: 2155

Very true, but I already had my ham license (for 22 years
already...longer than Echolink and cell phones have been around). The
Cell phone idea does not work for me since I don't have one (never have,
never will). I see them as just another unneccesary expense (monthly
fee + air time). Again, I'm just saying that Echolink is another tool
available to hams.

Scott
N0EDV

James Nipper wrote:
>
> You could have accomplished the very same thing with a cellphone, no ham
> license, and less hassle.
>
> --James--
>
> ------------------------------
>
> Well, I'll throw in my nickle's worth. Echolink is pretty nice when a
> sysop has their repeater hooked to it. Last winter we drove from WI to
> AZ and back. On the way back, I was able to connect up with our home
> repeater, through echolink, while we were leaving Denver to get a
> weather report from home. There was a raging snowstorm and I was able
> to determine if we should brave it or make another stop and delay the
> trip home by a day to let it pass. All this while we were on the road.
> Sure, I could have stopped and found someplace to tune in the weather
> channel, but this was more convenient and I got a more accurate
> description of the weather "right at home". I do not log contacts I
> make over Echolink. Echolink does have one other nice feature...For
> roundtable discussions, it's great. It's pretty hard to pick a band
> that will allow communications to all locations at once.
>
>

92. Re: iss qso wed 2feb 1254z on echolink

Newsgroup: rec.radio.amateur.space
Date: 2005-02-01 02:08:26 UTC
From: dontspam <dontspam@worldnet.att.net>
Message-ID: <svotv0th4amq3627bed5deoi8he3np7176@4ax.com>
Source record: 2156

Scott, you will never have a cellphone? Get with it man. Its time to
craw out of your cave. Echolink is the end of ham radio. Its almost
dead already. 73

On Mon, 31 Jan 2005 11:48:27 +0000, Scott <acepilot@bloomer.net>
wrote:

>Very true, but I already had my ham license (for 22 years
>already...longer than Echolink and cell phones have been around). The
>Cell phone idea does not work for me since I don't have one (never have,
>never will). I see them as just another unneccesary expense (monthly
>fee + air time). Again, I'm just saying that Echolink is another tool
>available to hams.
>
>Scott
>N0EDV
>
>James Nipper wrote:
>>
>> You could have accomplished the very same thing with a cellphone, no ham
>> license, and less hassle.
>>
>> --James--
>>
>> ------------------------------
>>
>> Well, I'll throw in my nickle's worth. Echolink is pretty nice when a
>> sysop has their repeater hooked to it. Last winter we drove from WI to
>> AZ and back. On the way back, I was able to connect up with our home
>> repeater, through echolink, while we were leaving Denver to get a
>> weather report from home. There was a raging snowstorm and I was able
>> to determine if we should brave it or make another stop and delay the
>> trip home by a day to let it pass. All this while we were on the road.
>> Sure, I could have stopped and found someplace to tune in the weather
>> channel, but this was more convenient and I got a more accurate
>> description of the weather "right at home". I do not log contacts I
>> make over Echolink. Echolink does have one other nice feature...For
>> roundtable discussions, it's great. It's pretty hard to pick a band
>> that will allow communications to all locations at once.
>>
>>

93. Re: iss qso wed 2feb 1254z on echolink

Newsgroup: rec.radio.amateur.space
Date: 2005-02-01 04:17:29 UTC
From: James Nipper <jnipper@nospam.fdn.com>
Message-ID: <FN6dnYmtC6p-n2LcRVn-tA@comcast.com>
Source record: 2157

I think that to make the statement that "Echolink is the end of ham radio"
is a mis-statement.

Echolink has absolutely nothing whatsover to do with ham radio. It can't
possibly have any effect on ham radio either way.

--James--

94. Re: iss qso wed 2feb 1254z on echolink

Newsgroup: rec.radio.amateur.space
Date: 2005-02-01 04:41:51 UTC
From: Buck <iam@this.site>
Message-ID: <0p1uv01iak7jutrgk4i0l6o8akcb1sn5vv@4ax.com>
Source record: 2158

On Mon, 31 Jan 2005 23:17:29 -0500, "James Nipper"
<jnipper@nospam.fdn.com> wrote:

>
>
>I think that to make the statement that "Echolink is the end of ham radio"
>is a mis-statement.
>
>
>Echolink has absolutely nothing whatsover to do with ham radio. It can't
>possibly have any effect on ham radio either way.
>
>
>--James--

It can be beneficial or a PITA. Several months ago our local repeater
was tied up for an hour while someone from New England talked to
someone in Germany. If they are both on Echo Link, why not just meet
on the computer?

Buck
--
For what it's worth.

95. Re: iss qso wed 2feb 1254z on echolink

Newsgroup: rec.radio.amateur.space
Date: 2005-02-01 12:08:08 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <b9idneoiMM3C7GLcRVn-rQ@bright.net>
Source record: 2159

I agree. I personally think Echolink (specifically VoIP applications)
are the end of telephones (home phones anyway). As more and more people
get broadband IP connections, IP telephones should become the norm.
Someday, I suspect, everything coming into the home (telephone,
internet, TV, etc.) will be coming in through the (possibly fiber-optic)
IP pipe. In telecom, we call that convergence. He who controls that
pipe will get all the money ;)

Scott
N0EDV

James Nipper wrote:
>
> I think that to make the statement that "Echolink is the end of ham radio"
> is a mis-statement.
>
>
> Echolink has absolutely nothing whatsover to do with ham radio. It can't
> possibly have any effect on ham radio either way.
>
>
> --James--
>

96. Re: iss qso wed 2feb 1254z on echolink

Newsgroup: rec.radio.amateur.space
Date: 2005-02-01 12:20:50 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <ueOdnXa80srF6WLcRVn-3Q@bright.net>
Source record: 2160

OK. My following statement is in all honesty, no sacasm or BS intended in any way...

Give me compelling reasons for getting a cellphone?

Where would I use it? I already have a landline phone and basic service is still cheaper than cellular.

I wouldn't use one in a car for normal use. I hate being bothered by every Tom, Dick and Harry while driving. Just personal preference. I have a friend who has his phone with him all the time while we're driving. It rings like every 15 minutes. Hard to carry on a conversation while constantly being interrupted by phone calls. I guess, to me, they are just plain annoying devices.

For emergency use they are good (if you're in an area with good coverage, ie along an Interstate highway). Here in WI, once you leave the beaten path for the "Outback" cellular is next to useless.

Plus, the biggie for me...900 MHz RF energy 1" from the ole noggin. Of course there is no proof (yet) about damage, but we've had a couple cases of brain cancer at work by people who use cellphones (of course, there is no way I can say that the cellphone had ANYTHING to do with it, but it makes the average RF Tech like me, wonder). One guy beat it, the other died at 43. I'm 42 and I don't feel like playing the odds since I AM the unluckiest person on the planet ;) External antenna on the car roof? That makes me feel better...

Scott
N0EDV

dontspam wrote:

> Scott, you will never have a cellphone? Get with it man. Its time to
> craw out of your cave. Echolink is the end of ham radio. Its almost
> dead already. 73
>
>
>
>
>
> On Mon, 31 Jan 2005 11:48:27 +0000, Scott <acepilot@bloomer.net>
> wrote:
>
>
>>Very true, but I already had my ham license (for 22 years
>>already...longer than Echolink and cell phones have been around). The

>>Cell phone idea does not work for me since I don't have one (never have,
>>never will). I see them as just another unneccesary expense (monthly
>>fee + air time). Again, I'm just saying that Echolink is another tool
>>available to hams.
>>
>>Scott
>>N0EDV
>>
>>James Nipper wrote:
>>
>>>You could have accomplished the very same thing with a cellphone, no ham
>>>license, and less hassle.
>>>
>>>--James--
>>>
>>>------------------------------
>>>
>>>Well, I'll throw in my nickle's worth. Echolink is pretty nice when a
>>>sysop has their repeater hooked to it. Last winter we drove from WI to
>>>AZ and back. On the way back, I was able to connect up with our home
>>>repeater, through echolink, while we were leaving Denver to get a
>>>weather report from home. There was a raging snowstorm and I was able
>>>to determine if we should brave it or make another stop and delay the
>>>trip home by a day to let it pass. All this while we were on the road.
>>> Sure, I could have stopped and found someplace to tune in the weather
>>>channel, but this was more convenient and I got a more accurate
>>>description of the weather "right at home". I do not log contacts I
>>>make over Echolink. Echolink does have one other nice feature...For
>>>roundtable discussions, it's great. It's pretty hard to pick a band
>>>that will allow communications to all locations at once.
>>>
>>>
>
>

97. Re: iss qso wed 2feb 1254z on echolink

Newsgroup: rec.radio.amateur.space
Date: 2005-02-01 17:41:57 UTC
From: Tom Randy <Sorry@spamsucks.net>
Message-ID: <pan.2005.02.01.17.41.27.401337@spamsucks.net>
Source record: 2161

On Tue, 01 Feb 2005 12:20:50 +0000, Scott wrote:

> OK. My following statement is in all honesty, no sacasm or BS intended
> in any way...
>
> Give me compelling reasons for getting a cellphone?
>
> Where would I use it? I already have a landline phone and basic service
> is still cheaper than cellular.

My cell is cheaper, a LOT cheaper. I have a pay as you go cell.

$38 for landline, $20 every 3 months for my cell.

I hardly ever use the phone though, I'm not much of a yak on the phone
guy...

> I wouldn't use one in a car for normal use. I hate being bothered by
> every Tom, Dick and Harry while driving. Just personal preference. I
> have a friend who has his phone with him all the time while we're
> driving. It rings like every 15 minutes. Hard to carry on a
> conversation while constantly being interrupted by phone calls. I
> guess, to me, they are just plain annoying devices.

Ummm, they can be turned off. I agree, people that use them every 2
minutes need to get lives. No non business type person needs to use
them every 2 minutes. I see asshole college kids leave class to answer
their cell and not for emergencies either, if I was the teacher I'd kick
their ass out of the class.

98. Re: Satscape and Labjack

Newsgroup: rec.radio.amateur.space
Date: 2005-02-01 21:28:28 UTC
From: "Alan P. Biddle" <APBIDDLE@ATT.NET>
Message-ID: <9tsvv0p4udo4hj53ts10i842m6q3mt8tmi@4ax.com>
Source record: 2162

Dennis,

Not quite what you asked for, but SATPC32 also supports Labjack. I am not a NOVA fan either, so perhaps it might be what you are looking for. Unlike Satscape, it is not freeware, but you can try the fully functional version at http://www.dk1tb.de/indexeng.htm The only nag is that you need to enter the QTH lat/lon each time you run it until you register.

Alan
WA4SCA

99. Re: iss qso wed 2feb 1254z on echolink

Newsgroup: rec.radio.amateur.space
Date: 2005-02-02 00:23:38 UTC
From: dontspam <dontspam@worldnet.att.net>
Message-ID: <0a70019v81rrmj47g4r24ugt0hidrgke74@4ax.com>
Source record: 2163

James, thats exactly what I am saying.
"Echolink has absolutely nothing whatsover to do with ham radio"

Those are YOUR words. 73

On Mon, 31 Jan 2005 23:17:29 -0500, "James Nipper"
<jnipper@nospam.fdn.com> wrote:

>
>
>I think that to make the statement that "Echolink is the end of ham radio"
>is a mis-statement.
>
>
>Echolink has absolutely nothing whatsover to do with ham radio. It can't
>possibly have any effect on ham radio either way.
>
>
>--James--

100. Re: iss qso wed 2feb 1254z on echolink

Newsgroup: rec.radio.amateur.space
Date: 2005-02-02 00:57:13 UTC
From: Buck <iam@this.site>
Message-ID: <5890015efrbkrfkgqheikkrm0qssbn9qvr@4ax.com>
Source record: 2164

On Tue, 01 Feb 2005 12:08:08 +0000, Scott <acepilot@bloomer.net>
wrote:

>I agree. I personally think Echolink (specifically VoIP applications)
>are the end of telephones (home phones anyway). As more and more people
>get broadband IP connections, IP telephones should become the norm.
>Someday, I suspect, everything coming into the home (telephone,
>internet, TV, etc.) will be coming in through the (possibly fiber-optic)
>IP pipe. In telecom, we call that convergence. He who controls that
>pipe will get all the money ;)
>
>Scott
>N0EDV
>
>James Nipper wrote:
>>
>> I think that to make the statement that "Echolink is the end of ham radio"
>> is a mis-statement.
>>
>>
>> Echolink has absolutely nothing whatsover to do with ham radio. It can't
>> possibly have any effect on ham radio either way.
>>
>>
>> --James--
>>

I'm still surprised that no one has come up with a telephone hand-set
that plugs into the phone connection on the modem and allows VOIP to
work through a telephone. Then a person can be on the computer doing
whatever and another member in the house can talk on the telephone
over the i'net to their friend's computer.

Buck
--
For what it's worth.

101. Re: iss qso wed 2feb 1254z on echolink

Newsgroup: rec.radio.amateur.space
Date: 2005-02-02 01:03:22 UTC
From: Buck <iam@this.site>
Message-ID: <pb90019r4uji2vhnugarb11frgo10c7bc8@4ax.com>
Source record: 2165

On Mon, 31 Jan 2005 23:41:51 -0500, Buck <iam@this.site> wrote:

>On Mon, 31 Jan 2005 23:17:29 -0500, "James Nipper"
><jnipper@nospam.fdn.com> wrote:
>
>>
>>
>>I think that to make the statement that "Echolink is the end of ham radio"
>>is a mis-statement.
>>
>>
>>Echolink has absolutely nothing whatsover to do with ham radio. It can't
>>possibly have any effect on ham radio either way.
>>
>>
>>--James--
>
>
>It can be beneficial or a PITA. Several months ago our local repeater
>was tied up for an hour while someone from New England talked to
>someone in Germany. If they are both on Echo Link, why not just meet
>on the computer?
>
>
>Buck

I tried out the EchoLink yesterday and today. It is interesting.
There is nothing like using the computer to connect to a repeater in
TN only to talk to a man on a computer in Germany. lol, just my
complaint !

I did have a few nice qsos with hams on repeaters though. When our
local computer gets their echolink repaired, it will be good that I
can log into it via computer when I don't have my radio handy. Then I
can talk to my friends and my son (a ham in a neighboring town who can
also hit the repeater.)

It has a purpose.

Just for information sake, I felt a bit guilty about using up a
repeater talking to another computer connection and cut the qso short.

It isn't the end of Ham Radio, btw. I can see that I could get WAS
Echolink endorsement in one weekend and never have to use a radio.
hihi

Buck
--
For what it's worth.

102. Re: iss qso wed 2feb 1254z on echolink

Newsgroup: rec.radio.amateur.space
Date: 2005-02-02 02:22:50 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <lf-dnUTCJZ8wpJ3fRVn-oQ@bright.net>
Source record: 2166

I agree with everything you state. Yes, I feel the same...people should turn off the cellphone to avoid having your conversation interrupted. I see that as just plain rude. As one of the world's oldest college students myself, I concur...keep the damn phones off during class. If you can't go 55 minutes without getting a call from your sweetie, just move in with them and quit school ;)

Scott

Tom Randy wrote:
> On Tue, 01 Feb 2005 12:20:50 +0000, Scott wrote:
>
>
>>OK. My following statement is in all honesty, no sacasm or BS intended
>>in any way...
>>
>>Give me compelling reasons for getting a cellphone?
>>
>>Where would I use it? I already have a landline phone and basic service
>>is still cheaper than cellular.
>
>
>
> My cell is cheaper, a LOT cheaper. I have a pay as you go cell.
>
> $38 for landline, $20 every 3 months for my cell.
>
> I hardly ever use the phone though, I'm not much of a yak on the phone
> guy...
>
>
>
>>I wouldn't use one in a car for normal use. I hate being bothered by
>>every Tom, Dick and Harry while driving. Just personal preference. I
>>have a friend who has his phone with him all the time while we're
>>driving. It rings like every 15 minutes. Hard to carry on a
>>conversation while constantly being interrupted by phone calls. I
>>guess, to me, they are just plain annoying devices.
>
>
>
> Ummm, they can be turned off. I agree, people that use them every 2
> minutes need to get lives. No non business type person needs to use
> them every 2 minutes. I see asshole college kids leave class to answer
> their cell and not for emergencies either, if I was the teacher I'd kick

> their ass out of the class.
>

103. local news stations microwave feeds

Newsgroup: rec.radio.amateur.space
Date: 2005-02-04 02:58:40 UTC
From: derdude <derdude@dirk.com>
Message-ID: <MPG.1c6c84bcbc66d6c989695@news.newsguy.com>
Source record: 2167

Not satellite but,

Has anybody tried receiving the microwave links the your local news station uses for sending the live feeds back to the station? If so what kind of equipment are you using?

Thanks...

104. Any have Noaa APT from modded Bearcat 210?

Newsgroup: rec.radio.amateur.space
Date: 2005-02-05 18:47:42 UTC
From: Charles Clayton <disposable1DELETETHIS@charlesc.net>
Message-ID: <cu34cd$3g7c$1@news3.infoave.net>
Source record: 2168

I'm looking for a real inexpensive way to receive Noaa APT without using the capacitor mod and am leaning towards buying a Bearcat 210 and moding it. (http://www.uvm.edu/~swarley/bc210.htm) Does anyone have example satellite images using this method? I've googled with no luck. Thanks!

I know this is slightly off topic, but figured the group be able to help.

105. Re: local news stations microwave feeds

Newsgroup: rec.radio.amateur.space
Date: 2005-02-06 08:53:32 UTC
From: Sarge <sarge43@ev1.net>
Message-ID: <110bmocpppseq6a@corp.supernews.com>
Source record: 2169

"derdude" <derdude@dirk.com> wrote in message
news:MPG.1c6c84bcbc66d6c989695@news.newsguy.com...
>
> Not satellite but,
>
> Has anybody tried receiving the microwave links the your local news
> station uses for sending the live feeds back to the station? If so what
> kind of equipment are you using?
>
> Thanks...

I'd think you'd need to be right between the two.

106. Re: local news stations microwave feeds

Newsgroup: rec.radio.amateur.space
Date: 2005-02-06 11:31:06 UTC
From: nana <nana@netscape.net>
Message-ID: <36mdg2F54c78fU1@individual.net>
Source record: 2170

You'd need to be able to see one of their antennas, preferably the transmit one! and something that can receive video at 2.6GHz, or 5 or 7 or 11GHz. They may also be digital by now too.

I have received local terrestrial feeds at 4GHz, but despite my efforts only got a noisy feed.

Nana

"Sarge" <sarge43@ev1.net> wrote in message news:110bmocpppseq6a@corp.supernews.com...
>
> "derdude" <derdude@dirk.com> wrote in message
> news:MPG.1c6c84bcbc66d6c989695@news.newsguy.com...
>>
>> Not satellite but,
>>
>> Has anybody tried receiving the microwave links the your local news
>> station uses for sending the live feeds back to the station? If so what
>> kind of equipment are you using?
>>
>> Thanks...
>
> I'd think you'd need to be right between the two.
>
>

107. Re: local news stations microwave feeds

Newsgroup: rec.radio.amateur.space
Date: 2005-02-06 16:00:01 UTC
From: yea right <spam@spam.spam>
Message-ID: <pan.2005.02.06.16.00.01.67821@spam.spam>
Source record: 2171

On Sun, 06 Feb 2005 22:31:06 +1100, nana wrote:

> You'd need to be able to see one of their antennas, preferably the
> transmit one! and something that can receive video at 2.6GHz, or 5 or 7 or
> 11GHz. They may also be digital by now too.
>
> I have received local terrestrial feeds at 4GHz, but despite my efforts
> only got a noisy feed.
>
In the US, all analog @ghz will be gone by the end of the year in most
large markets

108. Meteor Scatter Newsgroups?

Newsgroup: rec.radio.amateur.space
Date: 2005-02-06 22:39:52 UTC
From: Dan <w4nti@mindNOSPAMATALLspring.com>
Message-ID: <Y0xNd.3631$wK.1461@newsread3.news.atl.earthlink.net>
Source record: 2172
Cross-posted to: rec.radio.amateur.misc,alt.ham-radio.vhf-uhf,rec.radio.amateur.space

Can anyone direct me towards a discussion and/or skep page for Meteor Scatter on V/Uhf?

Dan/W4NTI

109. Re: Meteor Scatter Newsgroups?

Newsgroup: rec.radio.amateur.space
Date: 2005-02-06 23:12:07 UTC
From: Caveat Lector <CL@barahmas.com>
Message-ID: <bvxNd.29361$xt.28871@fed1read07>
Source record: 2174
Cross-posted to: rec.radio.amateur.misc,alt.ham-radio.vhf-uhf,rec.radio.amateur.space

Try Yahoo forums

Here is one

http://groups.yahoo.com/group/wsjtgroup/?yguid=6309253%3E

Probably more -- search the Yahoo forums

--
Caveat Lector (Reader Beware)
Help The New Hams
Someone Helped You
Or did You Forget That ?

"Dan" <w4nti@mindNOSPAMATALLspring.com> wrote in message
news:Y0xNd.3631$wK.1461@newsread3.news.atl.earthlink.net...
> Can anyone direct me towards a discussion and/or skep page for Meteor
> Scatter on V/Uhf?
>
> Dan/W4NTI
>
>

110. Re: Meteor Scatter Newsgroups?

Newsgroup: rec.radio.amateur.space
Date: 2005-02-06 23:14:08 UTC
From: Dennis Kaylor <k4oxg@tampabay.rr.com>
Message-ID: <4xxNd.12467$qB6.3028@tornado.tampabay.rr.com>
Source record: 2173
Cross-posted to: rec.radio.amateur.misc,alt.ham-radio.vhf-uhf,rec.radio.amateur.space

HEY DAN
go to www.pingjockey.com
they will have all the info you need for MS

Dan wrote:
> Can anyone direct me towards a discussion and/or skep page for Meteor
> Scatter on V/Uhf?
>
> Dan/W4NTI
>
>

111. Re: Meteor Scatter Newsgroups?

Newsgroup: rec.radio.amateur.space
Date: 2005-02-06 23:33:53 UTC
From: Pat Stevens <patstevenson@yahoo.com>
Message-ID: <BPxNd.3869$0G3.1985@news02.roc.ny>
Source record: 2175
Cross-posted to: rec.radio.amateur.misc,alt.ham-radio.vhf-uhf,rec.radio.amateur.space

"Dan" <w4nti@mindNOSPAMATALLspring.com> wrote in message
news:Y0xNd.3631$wK.1461@newsread3.news.atl.earthlink.net...
> Can anyone direct me towards a discussion and/or skep page for Meteor
> Scatter on V/Uhf?
>
> Dan/W4NTI
>
Dan, I am surprised. For all the times that you slam people that post,
that you would honestly post a real request. I suppose you shouldn't be
surprised that you get any "smart" answers to your post, like you give to
others.
Remember, "Do unto others as they do to you." ...or something like
that. :)

112. Re: Meteor Scatter Newsgroups?

Newsgroup: rec.radio.amateur.space
Date: 2005-02-07 02:13:59 UTC
From: Dan <w4nti@mindNOSPAMATALLspring.com>
Message-ID: <H9ANd.2574$oO.876@newsread2.news.atl.earthlink.net>
Source record: 2176
Cross-posted to: rec.radio.amateur.misc,alt.ham-radio.vhf-uhf,rec.radio.amateur.space

"Pat Stevens" <patstevenson@yahoo.com> wrote in message
news:BPxNd.3869$0G3.1985@news02.roc.ny...
> "Dan" <w4nti@mindNOSPAMATALLspring.com> wrote in message
> news:Y0xNd.3631$wK.1461@newsread3.news.atl.earthlink.net...
>> Can anyone direct me towards a discussion and/or skep page for Meteor
>> Scatter on V/Uhf?
>>
>> Dan/W4NTI
>>
> Dan, I am surprised. For all the times that you slam people that post,
> that you would honestly post a real request. I suppose you shouldn't be
> surprised that you get any "smart" answers to your post, like you give to
> others.
> Remember, "Do unto others as they do to you." ...or something like
> that. :)
>
>
>
Well Pat there is a lot of things you, and others, don't know about me. I enjoy tweaking folks. If you think it is ALL serious than I feel sorry for you.

Thanks to everyone for the links. I am finally in a position to do MS after 40 plus years of wanting to. With websites and computer programs it is a whole different world.

Last time I even attempted MS was with a Homebrew 4x150 to a pair of 10 element yagi's. Didn't work. (2 meters).

Dan/W4NTI

113. Re: local news stations microwave feeds

Newsgroup: rec.radio.amateur.space
Date: 2005-02-07 05:02:55 UTC
From: derdude <derdude@dirk.com>
Message-ID: <MPG.1c70965d4438164e989697@news.newsguy.com>
Source record: 2177

```
In article <pan.2005.02.06.16.00.01.67821@spam.spam>, spam@spam.spam
says...
> On Sun, 06 Feb 2005 22:31:06 +1100, nana wrote:
>
> > You'd need to be able to see one of their antennas, preferably the
> > transmit one! and something that can receive video at 2.6GHz, or 5 or 7 or
> > 11GHz. They may also be digital by now too.
> >
> > I have received local terrestrial feeds at 4GHz, but despite my efforts
> > only got a noisy feed.
> >
> In the US, all analog @ghz will be gone by the end of the year in most
> large markets
>
Thanks for the info...
```

114. Re: Meteor Scatter Newsgroups?

Newsgroup: rec.radio.amateur.space
Date: 2005-02-07 18:03:40 UTC
From: Pat Stevens <patstevenson@yahoo.com>
Message-ID: <04ONd.19$M36.4@news01.roc.ny>
Source record: 2178
Cross-posted to: rec.radio.amateur.misc,alt.ham-radio.vhf-uhf,rec.radio.amateur.space

"Dan" <w4nti@mindNOSPAMATALLspring.com> wrote in message
news:H9ANd.2574$oO.876@newsread2.news.atl.earthlink.net...
>
> Well Pat there is a lot of things you, and others, don't know about me.
I
> enjoy tweaking folks. If you think it is ALL serious than I feel sorry
for
> you.
>
I think it is MORE of a case that people don't WANT to know about you.
Between you and Bruce, you make amateur radio seem very
entertaining...especially on 40 meters.

115. AO-51 Experimental Wednsday

Newsgroup: rec.radio.amateur.space
Date: 2005-02-07 20:57:42 UTC
From: William Erhardt <erhardt@mt.net>
Message-ID: <uuKdncSG4qvXS5rfRVn-uQ@mt.net>
Source record: 2179

Howdy All,

Bill K7MT - A reminder that Wednsday Feb 9 , 2005 0000 - 2359 GMT is experimental Wednsday on AO-51 with 2 meters up and 2.4 GHZ downlink (V/S) mode. It starts Tuesday evening through Wed GMT. There are still a lot of folks out there calling CQ, whistling and kerchunking the satellite and not hearing the down link. Please listen to make sure you can hear the down link before xmitting over the top of a QSO. It takes a pretty good antenna to hear the downlink .

Look forward to mode V/S this expermental Wednsday on AO-51.

Cheers Bill K7MT AMSAT 33461

116. Could DirecTV satellite dishes be used for the Square Kilometer Array - and a more radical proposal[Re: Can DirectTV-type satellite dishes be used for SETI?]

Newsgroup: rec.radio.amateur.space
Date: 2005-02-07 23:07:03 UTC
From: rgregoryclark@yahoo.com
Message-ID: <832ea96d.0502071507.2bc4ff6d@posting.google.com>
Source record: 2180
Cross-posted to: sci.astro.seti,sci.astro,rec.radio.amateur.space,sci.physics

A.) According to this article $1.4 billion dollars is earmarked to be spent on the Square Kilometer array with completion expected by 2015:

Radio Astronomy Will Get a Boost With the Square Kilometer Array.
http://www.universetoday.com/am/publish/radio_astronomy_boost_ska.html?1592004

As I stated below the primary extra components to be added to the DirecTV dishes to be used for radio astronomy are the feedhorn and the preamp. The feedhorn is simply a metal pipe of little cost. The SetiLeague site lists sellers of specially made preamps for SETI search at $150. But these are handmade. From the low number of circuit elements, I estimate that if mass produced at the millions of items level the price could come down in the range of $10 each.
This site states the rate of growth of satellite TV subscribers is at 4 million per year:

Satellite TV Basics.
http://www.satellitetv-hq.com/hqguides/satellite-tv-basics.html

This means the *receivers* for the SKA system if using these satellite dishes could be installed in 1 year at an extra cost of $10 x 4,000,000 = $40 million dollars. Note that the feedhorn and the preamp could be attached at manufacture would not cost more on installation labor. The installation is already paid for by the satellite TV subscribers. To pay for the extra cost for the added equipment you could simply add $1 extra per month to the subscriber rate. Then these 4 million, .5 meter wide dishes would have a total collecting area of a disk 2000 x .5 m = 1000m = 1km wide, the total collecting area expected for the SKA. Moreover this would have the advantage that an additional square kilometer of collecting area would automatically be added every year over several years going by the present growth rate.
You could also attach the extra equipment to the 25 million satellite systems already installed in perhaps 4 or 5 years. The number of satellite TV subscribers worldwide was 60 million in 2003 and is expected to grow to 100 million by 2008:

Digital Satellite TV Platforms Continue to Gain Subscribers, and Profits are on the Rise.
http://www.instat.com/press.asp?ID=1171&sku=IN0401236MB

If this many .5 meter antennas were networked together, they would have the collecting area of a single antenna 10,000 x .5 m = 5 km wide.

Note that the idea of using over 50 million separate, stationary elements is one of the proposals being considered for the SKA architecture:

Aperture Array (AA)
http://www.skatelescope.org/pages/design_nl.htm

This method of keeping the receiving antennas fixed while detection directions are determined electronically is called the phased array approach and has the advantage that many separate targets can be observed simultaneously. It also has the advantage that interfering local signals can be suppressed. However, the Aperture Array has antennas close together in a predetermined configuration with the positions precisely determined. How could this work for the randomly positioned satellite dishes?
Methods of differential GPS and carrier phase synthesis now have the capability of determining position to within millimeters. The method compares the GPS signal between a precisely known site and an unknown site to locate the unknown site to within centimeters. Then a comparison is made in the actual phase of the signals received at the two sites to locate the unknown site to within millimeters:

CARRIER-PHASE TRACKING
"Carrier-phase tracking provides for a more accurate range resolution due to the short wavelength (about 19 centimeters for L1 and 24 centimeters for L2) and the ability of a receiver to resolve the carrier phase down to about 2 millimeters. This technique has primary application to engineering, topographic, and geodetic surveying and may be employed with either static or kinematic surveys. There are several techniques that use the carrier phase to determine a station's position. These include static, rapid-static, kinematic, stop-and-go kinematic, pseudokinematic, and on-the-fly (OTF) kinematic/Table 8-4 lists these techniques and their required components, applications, and accuracies."
http://cartome.org/FM3-34/Chapter8.htm

This should be sufficient for keeping the signals for the millions of antennas in phase up to perhaps 3 cm wavelength, 10 Ghz frequency. Timing synchronization can be obtained by synchronizing from the common signal received by the dishes from the satellite.
The Argus telescope at Ohio State University (this is different from Project Argus operated by The Seti League) may provide a model for how sensitive such a system can be operating from noisy populated areas:

Newsgroups: sci.astro.seti
From: Bob Dixon <dixo...@osu.edu>
Date: Wed, 19 May 2004 12:49:02 -0400
Subject: The Argus Telescope
http://groups-beta.google.com/group/sci.astro.seti/browse_frm/thread/54ddf1f29f629f20/

Argus Expands the Search For Life.
By Daniel Sorid
posted: 03:30 pm ET

09 June 2000
http://www.space.com/searchforlife/seti_argus_000609.html

Note though that the continent wide satellite dish system will have an advantage over Argus in dismissing unwanted signals in that such signals would only be detected by a local group of antennas not the continent wide system.

In mentioning an estimated price for this system, I emphasized the estimate was for the *receiving* part of the system. But of course for such a system of separate receivers, it is just as important to combine and process the signals.
In the thread for DirecTV being used for SETI, someone mentioned you might need to transfer 1 Gbps from each antenna for detections at 12 Ghz. I seem to recall that analog signals can be tranferred in greater density than digital signals. Perhaps the signal received by each antenna can be transmitted in analog form with a stamp indicating its location and time of origin.
For examples of the data density required we could look at some examples of systems of separate antennas that have been used to give combined signals in *real time*:

Astronomers Demonstrate a Global Internet Telescope.
Date Released: Friday, October 08, 2004.
http://www.spaceref.com/news/viewpr.html?pid=15251

This produced data of 32 Mbits/second for each telescope for observations at 1.6 Ghz. So at 16 Ghz perhaps 320 Mbps might be expected for each antenna. The data was sent over a high-speed internet network available to universities that operates at gigabits per second. Within a few years, the data transfer rate is expected to reach tens of gigabits per second.

And:

Prototype SETI Antenna Array Will Help Radio Astronomers Too.
Date Released: Wednesday, June 07, 2000.
http://www.spaceref.com/news/viewpr.html?pid=1992

This is of the Argus telescope at Ohio State University. The 64 antennas here detect signals from 400 to 2000 Mhz. The antennas together produce 2.56 gigabytes per second, or 20.48 gigabits per second. So each telescope produces 320 Mbps. This article states that no physical connection could economically carry that much data over distance however this was written in 2000. Ultra wideband technology (mentioned below) now has that capability.

For processing the data for the proposed SKA system, I expect the distributed computing system used by Set@Home to be used, wherein millions of computers take part in the calculations. As for how the data can be sent by the individual antennas, there are a few possible ways the signals could be combined.

1.)DirecTV offers a two-way broadband satellite internet service called DirecWay. This allows signals to be sent from the home antennas back up to the transmitting satellite. However, this system currently has only a 100,000 subscribers in place. I want to use the millions of subscribers using the satellite TV systems. I think a minor low-cost modification of the current TV antennas would also allow them to transmit to the satellites used for broadband internet service. (I don't think the satellites used for TV service can be used to receive signals.)

2.)Another possibility for transferring the data from each antenna might be to use military satellites currently used for surveillance on radio transmissions, perhaps using satellites that were decommissioned and are no longer used for sensitive military tasks.

3.)Possibly the techniques used with amateur packet radio could be used. Here radio links are used to setup data networks analogously to how the internet sets up data transfer networks using the TCP/IP protocols:

N6GN's Microwave Link Page
http://www.sonic.net/~n6gn/uwavelink/uwv.html

INEXPENSIVE MULTI-MEGABAUD MICROWAVE DATA LINK
http://www.sonic.net/~n6gn/hr89/uwvarticle.html

4.)Ultra wideband (UWB) promises gigabit data transfers over both cable and wireless connections and should be available this year (2005):

New chipset promises gigabit broadband on cable and wireless.
Rupert Goodwins
ZDNet UK
May 11, 2004, 15:20 GMT
http://news.zdnet.co.uk/communications/0,39020336,39154271,00.htm

Ultrawideband in 2005, but only in America
Rupert Goodwins
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Ultrawideband: Wireless Whoopee.
08:34 AM Oct. 09, 2004 PT
"SAN FRANCISCO -- Think of it as Wi-Fi on steroids. On its way to U.S. living rooms and maybe even automobiles is a new type of high-speed wireless connection that promises downloaded data rates of up to 1 gigabit per second -- roughly 18.5 times the speed of Wi-Fi -- to personal computers and other devices.
"This ultrawideband technology, which could become available in the next two years, also allows the devices to send data upstream to a network at 480 megabits per second."
http://www.wired.com/news/technology/0,1282,65297,00.html?tw=wn_tophead_3

5.)Some public utilities now collect their meter readings from radio transmitters attached to their meters. The data is collected by receiver on utility poles and then transmitted to a central site. This method could be adapted to work for collecting the data from the separate antennas.

6.) The above methods would require that the data transmissions be on specified frequencies that will not be used for detections. However, another method might not have this limitation:

Broadband Over Power Lines?
01:15 PM Feb. 09, 2003 PT
"ST. LOUIS -- Coming to a home or office near you could be an electric Internet: high-speed Web access via ubiquitous power lines, of all things, making every electrical outlet an always-on Web connection."
http://www.wired.com/news/technology/0,1282,57605,00.html

This is a new technique already being tested in small markets to provide interent service over power lines. The speed of transmission can be ramped up to 1 gigabits per second using ulta wideband technology.

B.)This last leads me to another proposal for large scale separated antennas for radio astronomy: using the electrical wiring in households as radio antennas. Here's a post to rec.radio.amateur.antenna discussing this:

==========
From: Ed Hare, W1RFI (w1rfi@arrl.net)
Subject: Re: ISO info about using house wiring as a TV antenna
Newsgroups: rec.radio.amateur.antenna
Date: 2000-12-29 15:33:06 PST

Richard Friday <tgirwf@bigfoot.com> wrote in message news:92j4h7$2b2$1@bob.news.rcn.net...

> I know this post might be off-topic but could find no other newsgroup that
> had "antenna" in its name. I'd be most appreciative if someone could point
> to a more suitable discussion or other source of information.
> I've seen advertised a device that claims to allow you to use the
> electrical wiring of your house as a tv antenna. You plug this device
> into an outlet, and then use connections it provides as your tv antenna.
> I'm trying to find out if this actually works but have not been able to
> find any reviews.

This device will receive some signals. However, house electrical wiring is
not a very good VHF antenna system for a couple of reasons:

First, it is very difficult to predict the direction that the house wiring
will best receive from. It is quite likely that the antenna pattern will
have all sorts of peaks and nulls, sort of as if you had a rotatable

TV
antenna that was pointing in several directions at once. This may not
pick
up much of the TV signal you want to pick up or may have multiple
responses,
resulting in ghosts.

Also, an electrical power line can be a very noisy place. All sorts of
electronic devices on the line, from power-line equipment itself to
every
motor or power supply plugged in near you may create noise that will
interfere with the signal you want to receive.

If you have no other antenna choice, that device may be useable, but I
don't
think it will work as well as a good set of "rabbit ears" on top of
your TV.

Ed Hare, W1RFI
==========

The disadvantage of the electrical wiring going in several different
directions may actually be an advantage in regards to a SETI search
since you would want the detections to be omnidirectional. If there
are 100,000,000 homes which average 10 meters across then this would
result in a collecting area of 10,000 x 10 meters = 100 km across.
Since you would want to include large commercial establishments, the
size would actually be larger than this.

Bob Clark

rgregoryclark@yahoo.com wrote in message
news:<1106126272.160248.294240@z14g2000cwz.googlegroups.com>...
> I was interested to read this on the Seti League web site:
>
> _____
> Parasitic SETI
> Dear Dr. SETI:
> As a Satellite dish owner and a strong interest in SETI, I was
> wondering if anything is available to allow the home satellite dish
> owner to 'search' when he is not watching TV. I do a bit of programing
> and would love to help make it so home dish owners could do this. Is it
> possible? What would it take? Does the dish have to follow a spot or
> can it sweep the sky from a fixed position? If this is possible it
> could add a million listeners to the system.
>
> Bill T.
>
> The Doctor Responds:
> Absolutely, Bill! Parasitic SETI with a home satellite TV dish is not
> only feasilble, it's widely practiced. A second feedhorn and preamp
> assembly are mounted next to the C-band horn/LNB at the apex of the

> dish (see Figure 2 of this article). This assembly feeds the rest of a
> SETI system (see our online Tech Manual). You can then sweep out the
> sky, as described here. And yes, a million participants would be nice,
> but our goal is a more modest 5000 stations.
> ____
> http://www.setileague.org/askdr/parasite.htm
>
> I believe they are referring to the 6 ft. backyard type antennas,
> judging from the linked images on the page. But could the roof mounted
> DirectTV and Dish Network type antennas be used for SETI?
> The mentioned extra equipment are an extra feedhorn and a
> preamplifier. The feedhorn can made cheaply but the preamp seems
> expensive. If these preamps were mass produced for this purpose could
> their per item cost be brought under $50?
> I'm envisionig a government agency such as NSF, or a scientically
> interested billionaire, paying satellite TV companies to attach this
> extra equipment to their satellite dishes. Say $100 million is
> earmarked for the program. Then you would want the extra cost to be
> under $100 for each dish for say 1,000,000 subscribers. Judging from
> the diagram in the online Tech Manual linked to on the page, the other
> equipment should be doable by the equipment that comes with the
> satellite TV system. Computer processing would be done separately at a
> central location.
> If you had a 1,000,000 of these .5 meter wide antennas it would have
> the detection sensitivy of a single antenna 500 meters wide.
> Bob Clark

117. Re: Could DirecTV satellite dishes be used for the Square Kilometer Array - and a more radical proposal[Re: Can DirectTV-type satellite dishes be used for SETI?]

Newsgroup: rec.radio.amateur.space
Date: 2005-02-08 00:30:16 UTC
From: Teage <gone@invalid.com>
Message-ID: <36qfg1F55cqs7U1@individual.net>
Source record: 2181
Cross-posted to: sci.astro.seti,sci.astro,rec.radio.amateur.space,sci.physics

Show me the math that says you can detect a signal.

118. AO-51 Experimental Wed Correction

Newsgroup: rec.radio.amateur.space
Date: 2005-02-08 17:18:20 UTC
From: William Erhardt <erhardt@mt.net>
Message-ID: <w9OdnVGVxI3-aZXfRVn-3Q@mt.net>
Source record: 2182

K7MT in Helena, Mt.

Correction on Experimental Wed. AO-51 will be in 9600 baud digital mode. Starting Thursday GMT the satellite will be in V/S mode 2 meters up and 2.4 ghz down for next seven days through 15 february and then it will be L/S mode 1.2 ghz up and 2.4 ghz down on 16 February.

Check schedule on amsat.org page satellite status then the control team schedule for details.

Cheers Bill K7MT AMSAT 33461

119. Re: Could DirecTV satellite dishes be used for the Square Kilometer Array - and a more radical proposal[Re: Can DirectTV-type satellite dishes be used for SETI?]

Newsgroup: rec.radio.amateur.space
Date: 2005-02-09 06:43:56 UTC
From: Rob Dekker <rob@verific.com>
Message-ID: <MiiOd.3388$ZZ.3196@newssvr23.news.prodigy.net>
Source record: 2183
Cross-posted to: sci.astro.seti,sci.astro,rec.radio.amateur.space,sci.physics

Hi Robert,

I don't want to sound negative, but your plan is really not an alternative or even competition for the SKA.
Other people already commented on many yet unresolved issues :

- Bandwidth is restricted to the data rate of getting signals from the dishes to the central place.
- A non-phased array suffers significantly on sensitivity AND on narrow-beam forming w.r.t. a phased array (such as SKA and ATA)
- Static DirectTV dishes diminish aiming the beam (one of the downsides of Arecibo too).
- Cost is not only in the receiving elements. Cost calculation would need to include the entire system.

Rob

"Robert Clark" <rgregoryclark@yahoo.com> wrote in message
news:832ea96d.0502071507.2bc4ff6d@posting.google.com...
> A.) According to this article $1.4 billion dollars is earmarked to be
> spent on the Square Kilometer array with completion expected by 2015:
>
> Radio Astronomy Will Get a Boost With the Square Kilometer Array.
> http://www.universetoday.com/am/publish/radio_astronomy_boost_ska.html?1592004
>
> As I stated below the primary extra components to be added to the
> DirecTV dishes to be used for radio astronomy are the feedhorn and the
> preamp. The feedhorn is simply a metal pipe of little cost. The
> SetiLeague site lists sellers of specially made preamps for SETI
> search at $150. But these are handmade. From the low number of circuit
> elements, I estimate that if mass produced at the millions of items
> level the price could come down in the range of $10 each.
> This site states the rate of growth of satellite TV subscribers is at
> 4 million per year:
>
> Satellite TV Basics.
> http://www.satellitetv-hq.com/hqguides/satellite-tv-basics.html
>
> This means the *receivers* for the SKA system if using these
> satellite dishes could be installed in 1 year at an extra cost of $10
> x 4,000,000 = $40 million dollars. Note that the feedhorn and the
> preamp could be attached at manufacture would not cost more on
> installation labor. The installation is already paid for by the

> satellite TV subscribers. To pay for the extra cost for the added
> equipment you could simply add $1 extra per month to the subscriber
> rate. Then these 4 million, .5 meter wide dishes would have a total
> collecting area of a disk 2000 x .5 m = 1000m = 1km wide, the total
> collecting area expected for the SKA. Moreover this would have the
> advantage that an additional square kilometer of collecting area would
> automatically be added every year over several years going by the
> present growth rate.
> You could also attach the extra equipment to the 25 million satellite
> systems already installed in perhaps 4 or 5 years. The number of
> satellite TV subscribers worldwide was 60 million in 2003 and is
> expected to grow to 100 million by 2008:
>
> Digital Satellite TV Platforms Continue to Gain Subscribers, and
> Profits are on the Rise.
> http://www.instat.com/press.asp?ID=1171&sku=IN0401236MB
>
> If this many .5 meter antennas were networked together, they would
> have the collecting area of a single antenna 10,000 x .5 m = 5 km
> wide.
>
> Note that the idea of using over 50 million separate, stationary
> elements is one of the proposals being considered for the SKA
> architecture:
>
> Aperture Array (AA)
> http://www.skatelescope.org/pages/design_nl.htm
>
> This method of keeping the receiving antennas fixed while detection
> directions are determined electronically is called the phased array
> approach and has the advantage that many separate targets can be
> observed simultaneously. It also has the advantage that interfering
> local signals can be suppressed. However, the Aperture Array has
> antennas close together in a predetermined configuration with the
> positions precisely determined. How could this work for the randomly
> positioned satellite dishes?
> Methods of differential GPS and carrier phase synthesis now have the
> capability of determining position to within millimeters. The method
> compares the GPS signal between a precisely known site and an unknown
> site to locate the unknown site to within centimeters. Then a
> comparison is made in the actual phase of the signals received at the
> two sites to locate the unknown site to within millimeters:
>
> CARRIER-PHASE TRACKING
> "Carrier-phase tracking provides for a more accurate range resolution
> due to the short wavelength (about 19 centimeters for L1 and 24
> centimeters for L2) and the ability of a receiver to resolve the
> carrier phase down to about 2 millimeters. This technique has primary
> application to engineering, topographic, and geodetic surveying and
> may be employed with either static or kinematic surveys. There are

> several techniques that use the carrier phase to determine a station's
> position. These include static, rapid-static, kinematic, stop-and-go
> kinematic, pseudokinematic, and on-the-fly (OTF) kinematic/Table 8-4
> lists these techniques and their required components, applications,
> and accuracies."
> http://cartome.org/FM3-34/Chapter8.htm
>
> This should be sufficient for keeping the signals for the millions of
> antennas in phase up to perhaps 3 cm wavelength, 10 Ghz frequency.
> Timing synchronization can be obtained by synchronizing from the
> common signal received by the dishes from the satellite.
> The Argus telescope at Ohio State University (this is different from
> Project Argus operated by The Seti League) may provide a model for how
> sensitive such a system can be operating from noisy populated areas:
>
> Newsgroups: sci.astro.seti
> From: Bob Dixon <dixo...@osu.edu>
> Date: Wed, 19 May 2004 12:49:02 -0400
> Subject: The Argus Telescope
> http://groups-beta.google.com/group/sci.astro.seti/browse_frm/thread/54ddf1f29f629f20/
>
> Argus Expands the Search For Life.
> By Daniel Sorid
> posted: 03:30 pm ET
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> Note though that the continent wide satellite dish system will have
> an advantage over Argus in dismissing unwanted signals in that such
> signals would only be detected by a local group of antennas not the
> continent wide system.
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> In mentioning an estimated price for this system, I emphasized the
> estimate was for the *receiving* part of the system. But of course for
> such a system of separate receivers, it is just as important to
> combine and process the signals.
> In the thread for DirecTV being used for SETI, someone mentioned you
> might need to transfer 1 Gbps from each antenna for detections at 12
> Ghz. I seem to recall that analog signals can be tranferred in greater
> density than digital signals. Perhaps the signal received by each
> antenna can be transmitted in analog form with a stamp indicating its
> location and time of origin.
> For examples of the data density required we could look at some
> examples of systems of separate antennas that have been used to give
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120. Radio Meteor Obs. Bull. January 2005 Quadrantids

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Date: 2005-02-09 19:23:44 UTC
From: Chris Steyaert <observations@rmob.org>
Message-ID: <0kok0150iil2dhrc9sr96vicuq4685sm1t@4ax.com>
Source record: 2184
Cross-posted to: rec.radio.amateur.space,sci.astro.amateur

Radio Meteor Observation Bulletin No. 138 of Janauary 2005 (63 K) is available now as

http://visualrmob.free.fr/rmobtext/rmob0501.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

http://radio.data.free.fr

Chris

121. Henry Amps RIP

Newsgroup: rec.radio.amateur.space
Date: 2005-02-10 17:47:22 UTC
From: Chuck K8CPA <k8cpachuck@gmail.com>
Message-ID: <vg7n01d78g0msotjtgbb2jdl123tcoved1@4ax.com>
Source record: 2185

Hi Guys,

I heard the news via the internet... and it's true. Henry amps are no more...:

Here's the e-mail from Mr. Henry Himself:

From: "Ted Henry" <henryradio@earthlink.net>
To: "Chuck Adkins (K8CPA)" <**********@comcast.net>
Subject: Re: Lost your Lease?
Date: Thursday, February 10, 2005 12:23 PM

There were about 15 reasons why we stopped - the primary reason was that the business has lost money for a number of years. The loss of the lease was about 5th down on the many reasons it made no sense to continue the business.

Thanks for your interest.

Ted Shannon Henry

Ted Shannon
HENRY RADIO, INC.
2050 South Bundy Drive Suite 285
Los Angeles, CA 90025

henryradio@earthlink.net
www.henryradio.com
eBay Store: http://stores.ebay.com/Henry-Radio

310-820-1234 ext 310
310-826-7790 FAX

----- Original Message -----
From: Chuck Adkins (K8CPA)
To: henryradio@earthlink.net
Sent: Thursday, February 10, 2005 8:52 AM
Subject: Lost your Lease?

Hi Guys,

why not just find another building? and Continue on?

Makes no sense to stop.

-Chuck K8CPA

122. Re: Could DirecTV satellite dishes be used for the Square Kilometer Array - and a more radical proposal[Re: Can DirectTV-type satellite dishes be used for SETI?]

Newsgroup: rec.radio.amateur.space
Date: 2005-02-10 20:29:50 UTC
From: Joseph Lazio <jlazio@adams.patriot.net>
Message-ID: <ll3bw46tvl.fsf@adams.patriot.net>
Source record: 2186
Cross-posted to: sci.astro.seti,sci.astro,rec.radio.amateur.space,sci.physics

>>>>> "RD" == Rob Dekker <rob@verific.com> writes:

RD> I don't want to sound negative, but your plan is really not an
RD> alternative or even competition for the SKA. Other people already
RD> commented on many yet unresolved issues :
RD> [...] - Cost is not only in the receiving elements. Cost
RD> calculation would need to include the entire system.

Indeed, there is considerable concern about the 12-m dishes proposed
by the U.S. and Indian groups for exactly this reason. The 12-m
dishes and associated electronics have costs that are similar to other
proposals. There are some people, though, who worry that it will be
impossible to process the data from an array composed of 12-m dishes
because there won't be enough computing power, even in 2020.

--
Lt. Lazio, HTML police | e-mail: jlazio@patriot.net
No means no, stop rape. | http://patriot.net/%7Ejlazio/
sci.astro FAQ at http://sciastro.astronomy.net/sci.astro.html

123. Re: Could DirecTV satellite dishes be used for the Square Kilometer Array - and a more radical proposal[Re: Can DirectTV-type satellite dishes be used for SETI?]

Newsgroup: rec.radio.amateur.space
Date: 2005-02-11 13:00:09 UTC
From: Robert Clark <rgregoryclark@yahoo.com>
Message-ID: <1108126809.186657.45710@o13g2000cwo.googlegroups.com>
Source record: 2187
Cross-posted to: sci.astro.seti,sci.astro,rec.radio.amateur.space,sci.physics

Dr. H. Paul Shuch, executive director of the SETI League, sent a
response via email on this proposal which he has granted permission to
post here:

==========
Date : Tue, Feb 08 09:47 AM EST 2005
>From : "Dr. H. Paul Shuch" <****@setileague.org>
To : Robert Clark <****@****.widener.edu>
Reply To : "Dr. H. Paul Shuch" <****@setileague.org>
Subject : Re: Could DirecTV satellite dishes be used for the Square
Kilometer Array - and a more radical proposal.

Robert Clark wrote:

> Hello Dr. Shuch. The following was posted to sci.astro.

Many thanks, Bob. This is an interesting thread, and I appreciate you

sharing it with me. I can see two possible drawbacks to the proposal
(and you have my permission to post my comments to the usnet group):

(1) Fequency coverage. There is a practical limit to the frequency
range over which a parabolic reflector can efficiently be used. The
upper limit is set by surface smoothness (deviations from the parabolic

curve should not exceed about 1/10 wavelength at the highest operating
frequency). There is also a lower limit; the diameter of the dish
should not be less than about 20 wavelengths at the lowest operating
frequency. In the case of 0.5 meter diameter DBS dishes, this means
the
shortest practical operating wavelength is 2.5 cm, equating to a lowest

practical operating frequency of 12 GHz. (I know, many hams use these
dishes successfully at 10,368 MHz, but their efficiency is lower than
you would expect, and the pattern not as sharp as it should be.) It is

no coincidence that 1/2 meter diameter dishes are used for a satellite
band that extends from 12 to 14 GHz! If used for SETI, we would lose
access to most of the interesting microwave spectrum.

(2) Spatial coverage. Antennas used for satellite TV reception spend
their life pointed at communications satellites. Those satellites park

in a specific arc (the Clarke, or geosynchronous orbit, belt). As
viewed from Earth, at different latitudes, all antennas pointed at the
Clarke belt subtend a narrow range of declinations (from about +10 to
-10 degrees Dec.) So, even neglecting limited right ascension coverage

(the subtended RA will vary as the Earth rotates on its axis), a
network
of DBS dishes doing parasitic SETI will miss about 90% of the sky.
Now,
we might get lucky, and find ETI lurking on or near the ecliptic. But
out to maybe 1000 LY, stars are uniformly distributed in declination,
with respect to Earth. And even more distant stars, such as those
dense
populations at the galactic centre, are at declinations very different
from the Clarke satellite belt (the galactic centre is in Saggitarius,
some -27 or so degrees in declination). Thus, unless we point those
millions of dishes somewhere other than at the direct broadcast
satellites, we'll probably miss ETI.

Not to throw cold water on the subject; I would certainly encourage
such
a collaborative venture. Only, don't think it will solve all the SETI
problems.

Yours for SETI success,
Paul

--
H. Paul Shuch, Ph.D. Executive Director, The SETI League, Inc.
URL http://www.setileague.org
"We Know We're Not Alone!"
==========

Robert Clark wrote:
> A.) According to this article $1.4 billion dollars is earmarked to be
> spent on the Square Kilometer array with completion expected by 2015:
>
> Radio Astronomy Will Get a Boost With the Square Kilometer Array.
>
http://www.universetoday.com/am/publish/radio_astronomy_boost_ska.html?1592004
>
> As I stated below the primary extra components to be added to the
> DirecTV dishes to be used for radio astronomy are the feedhorn and
the
> preamp. The feedhorn is simply a metal pipe of little cost. The
> SetiLeague site lists sellers of specially made preamps for SETI
> search at $150. But these are handmade. From the low number of
circuit
> elements, I estimate that if mass produced at the millions of items
> level the price could come down in the range of $10 each.
> This site states the rate of growth of satellite TV subscribers is
at
> 4 million per year:

>
> Satellite TV Basics.
> http://www.satellitetv-hq.com/hqguides/satellite-tv-basics.html
>
> This means the *receivers* for the SKA system if using these
> satellite dishes could be installed in 1 year at an extra cost of $10
> x 4,000,000 = $40 million dollars. Note that the feedhorn and the
> preamp could be attached at manufacture would not cost more on
> installation labor. The installation is already paid for by the
> satellite TV subscribers. To pay for the extra cost for the added
> equipment you could simply add $1 extra per month to the subscriber
> rate. Then these 4 million, .5 meter wide dishes would have a total
> collecting area of a disk 2000 x .5 m = 1000m = 1km wide, the total
> collecting area expected for the SKA. Moreover this would have the
> advantage that an additional square kilometer of collecting area
would
> automatically be added every year over several years going by the
> present growth rate.
> You could also attach the extra equipment to the 25 million
satellite
> systems already installed in perhaps 4 or 5 years. The number of
> satellite TV subscribers worldwide was 60 million in 2003 and is
> expected to grow to 100 million by 2008:
>
> Digital Satellite TV Platforms Continue to Gain Subscribers, and
> Profits are on the Rise.
> http://www.instat.com/press.asp?ID=1171&sku=IN0401236MB
>
> If this many .5 meter antennas were networked together, they would
> have the collecting area of a single antenna 10,000 x .5 m = 5 km
> wide.
>
> Note that the idea of using over 50 million separate, stationary
> elements is one of the proposals being considered for the SKA
> architecture:
>
> Aperture Array (AA)
> http://www.skatelescope.org/pages/design_nl.htm
>
> This method of keeping the receiving antennas fixed while detection
> directions are determined electronically is called the phased array
> approach and has the advantage that many separate targets can be
> observed simultaneously. It also has the advantage that interfering
> local signals can be suppressed. However, the Aperture Array has
> antennas close together in a predetermined configuration with the
> positions precisely determined. How could this work for the randomly
> positioned satellite dishes?
> Methods of differential GPS and carrier phase synthesis now have the
> capability of determining position to within millimeters. The method
> compares the GPS signal between a precisely known site and an unknown

> site to locate the unknown site to within centimeters. Then a
> comparison is made in the actual phase of the signals received at the
> two sites to locate the unknown site to within millimeters:
>
> CARRIER-PHASE TRACKING
> "Carrier-phase tracking provides for a more accurate range resolution
> due to the short wavelength (about 19 centimeters for L1 and 24
> centimeters for L2) and the ability of a receiver to resolve the
> carrier phase down to about 2 millimeters. This technique has primary
> application to engineering, topographic, and geodetic surveying and
> may be employed with either static or kinematic surveys. There are
> several techniques that use the carrier phase to determine a
station's
> position. These include static, rapid-static, kinematic, stop-and-go
> kinematic, pseudokinematic, and on-the-fly (OTF) kinematic/Table 8-4
> lists these techniques and their required components, applications,
> and accuracies."
> http://cartome.org/FM3-34/Chapter8.htm
>
> This should be sufficient for keeping the signals for the millions
of
> antennas in phase up to perhaps 3 cm wavelength, 10 Ghz frequency.
> Timing synchronization can be obtained by synchronizing from the
> common signal received by the dishes from the satellite.
> The Argus telescope at Ohio State University (this is different from
> Project Argus operated by The Seti League) may provide a model for
how
> sensitive such a system can be operating from noisy populated areas:
>
> Newsgroups: sci.astro.seti
> From: Bob Dixon <dixo...@osu.edu>
> Date: Wed, 19 May 2004 12:49:02 -0400
> Subject: The Argus Telescope
>
http://groups-beta.google.com/group/sci.astro.seti/browse_frm/thread/54ddf1f29f629f20/
>
> Argus Expands the Search For Life.
> By Daniel Sorid
> posted: 03:30 pm ET
> 09 June 2000
> http://www.space.com/searchforlife/seti_argus_000609.html
>
> Note though that the continent wide satellite dish system will have
> an advantage over Argus in dismissing unwanted signals in that such
> signals would only be detected by a local group of antennas not the
> continent wide system.
>
> In mentioning an estimated price for this system, I emphasized the
> estimate was for the *receiving* part of the system. But of course
for

> such a system of separate receivers, it is just as important to
> combine and process the signals.
> In the thread for DirecTV being used for SETI, someone mentioned you
> might need to transfer 1 Gbps from each antenna for detections at 12
> Ghz. I seem to recall that analog signals can be tranferred in
greater
> density than digital signals. Perhaps the signal received by each
> antenna can be transmitted in analog form with a stamp indicating its
> location and time of origin.
> For examples of the data density required we could look at some
> examples of systems of separate antennas that have been used to give
> combined signals in *real time*:
>
> Astronomers Demonstrate a Global Internet Telescope.
> Date Released: Friday, October 08, 2004.
> http://www.spaceref.com/news/viewpr.html?pid=15251
>
> This produced data of 32 Mbits/second for each telescope for
> observations at 1.6 Ghz. So at 16 Ghz perhaps 320 Mbps might be
> expected for each antenna. The data was sent over a high-speed
> internet network available to universities that operates at gigabits
> per second. Within a few years, the data transfer rate is expected to
> reach tens of gigabits per second.
>
> And:
>
> Prototype SETI Antenna Array Will Help Radio Astronomers Too.
> Date Released: Wednesday, June 07, 2000.
> http://www.spaceref.com/news/viewpr.html?pid=1992
>
> This is of the Argus telescope at Ohio State University. The 64
> antennas here detect signals from 400 to 2000 Mhz. The antennas
> together produce 2.56 gigabytes per second, or 20.48 gigabits per
> second. So each telescope produces 320 Mbps. This article states that
> no physical connection could economically carry that much data over
> distance however this was written in 2000. Ultra wideband technology
> (mentioned below) now has that capability.
>
> For processing the data for the proposed SKA system, I expect the
> distributed computing system used by Set@Home to be used, wherein
> millions of computers take part in the calculations. As for how the
> data can be sent by the individual antennas, there are a few possible
> ways the signals could be combined.
>
> 1.)DirecTV offers a two-way broadband satellite internet service
> called DirecWay. This allows signals to be sent from the home
antennas
> back up to the transmitting satellite. However, this system currently
> has only a 100,000 subscribers in place. I want to use the millions
of

> subscribers using the satellite TV systems. I think a minor low-cost
> modification of the current TV antennas would also allow them to
> transmit to the satellites used for broadband internet service. (I
> don't think the satellites used for TV service can be used to receive
> signals.)
>
> 2.)Another possibility for transferring the data from each antenna
> might be to use military satellites currently used for surveillance
on
> radio transmissions, perhaps using satellites that were
decommissioned
> and are no longer used for sensitive military tasks.
>
> 3.)Possibly the techniques used with amateur packet radio could be
> used. Here radio links are used to setup data networks analogously to
> how the internet sets up data transfer networks using the TCP/IP
> protocols:
>
> N6GN's Microwave Link Page
> http://www.sonic.net/~n6gn/uwavelink/uwv.html
>
> INEXPENSIVE MULTI-MEGABAUD MICROWAVE DATA LINK
> http://www.sonic.net/~n6gn/hr89/uwvarticle.html
>
> 4.)Ultra wideband (UWB) promises gigabit data transfers over both
> cable and wireless connections and should be available this year
> (2005):
>
> New chipset promises gigabit broadband on cable and wireless.
> Rupert Goodwins
> ZDNet UK
> May 11, 2004, 15:20 GMT
> http://news.zdnet.co.uk/communications/0,39020336,39154271,00.htm
>
> Ultrawideband in 2005, but only in America
> Rupert Goodwins
> ZDNet UK
> February 19, 2004, 09:45 GMT
>
http://news.zdnet.co.uk/communications/wireless/0,39020348,39146644,00.htm
>
> Ultrawideband: Wireless Whoopee.
> 08:34 AM Oct. 09, 2004 PT
> "SAN FRANCISCO -- Think of it as Wi-Fi on steroids. On its way to
U.S.
> living rooms and maybe even automobiles is a new type of high-speed
> wireless connection that promises downloaded data rates of up to 1
> gigabit per second -- roughly 18.5 times the speed of Wi-Fi -- to
> personal computers and other devices.
> "This ultrawideband technology, which could become available in the

> next two years, also allows the devices to send data upstream to a
> network at 480 megabits per second."
>
http://www.wired.com/news/technology/0,1282,65297,00.html?tw=wn_tophead_3
>
> 5.)Some public utilities now collect their meter readings from radio
> transmitters attached to their meters. The data is collected by
> receiver on utility poles and then transmitted to a central site.
This
> method could be adapted to work for collecting the data from the
> separate antennas.
>
> 6.) The above methods would require that the data transmissions be on
> specified frequencies that will not be used for detections. However,
> another method might not have this limitation:
>
> Broadband Over Power Lines?
> 01:15 PM Feb. 09, 2003 PT
> "ST. LOUIS -- Coming to a home or office near you could be an
electric
> Internet: high-speed Web access via ubiquitous power lines, of all
> things, making every electrical outlet an always-on Web connection."
> http://www.wired.com/news/technology/0,1282,57605,00.html
>
> This is a new technique already being tested in small markets to
> provide interent service over power lines. The speed of transmission
> can be ramped up to 1 gigabits per second using ulta wideband
> technology.
>
> B.)This last leads me to another proposal for large scale separated
> antennas for radio astronomy: using the electrical wiring in
> households as radio antennas. Here's a post to
> rec.radio.amateur.antenna discussing this:
>
>
==========
> From: Ed Hare, W1RFI (w1rfi@arrl.net)
> Subject: Re: ISO info about using house wiring as a TV antenna
> Newsgroups: rec.radio.amateur.antenna
> Date: 2000-12-29 15:33:06 PST
>
> Richard Friday <tgirwf@bigfoot.com> wrote in message
> news:92j4h7$2b2$1@bob.news.rcn.net...
>
> > I know this post might be off-topic but could find no other
newsgroup that
> > had "antenna" in its name. I'd be most appreciative if someone
could point
> > to a more suitable discussion or other source of information.
> > I've seen advertised a device that claims to allow you to use the

> > electrical wiring of your house as a tv antenna. You plug this
device
> > into an outlet, and then use connections it provides as your tv
antenna.
> > I'm trying to find out if this actually works but have not been
able to
> > find any reviews.
>
> This device will receive some signals. However, house electrical
> wiring is
> not a very good VHF antenna system for a couple of reasons:
>
> First, it is very difficult to predict the direction that the house
> wiring
> will best receive from. It is quite likely that the antenna pattern
> will
> have all sorts of peaks and nulls, sort of as if you had a rotatable
> TV
> antenna that was pointing in several directions at once. This may
not
> pick
> up much of the TV signal you want to pick up or may have multiple
> responses,
> resulting in ghosts.
>
> Also, an electrical power line can be a very noisy place. All sorts
of
> electronic devices on the line, from power-line equipment itself to
> every
> motor or power supply plugged in near you may create noise that will
> interfere with the signal you want to receive.
>
> If you have no other antenna choice, that device may be useable, but
I
> don't
> think it will work as well as a good set of "rabbit ears" on top of
> your TV.
>
> Ed Hare, W1RFI
>
==========
>
> The disadvantage of the electrical wiring going in several different
> directions may actually be an advantage in regards to a SETI search
> since you would want the detections to be omnidirectional. If there
> are 100,000,000 homes which average 10 meters across then this would
> result in a collecting area of 10,000 x 10 meters = 100 km across.
> Since you would want to include large commercial establishments, the
> size would actually be larger than this.
>

>
>
> Bob Clark
>
>
> rgregoryclark@yahoo.com wrote in message
news:<1106126272.160248.294240@z14g2000cwz.googlegroups.com>...
> > I was interested to read this on the Seti League web site:
> >
> > _____
> > Parasitic SETI
> > Dear Dr. SETI:
> > As a Satellite dish owner and a strong interest in SETI, I was
> > wondering if anything is available to allow the home satellite dish
> > owner to 'search' when he is not watching TV. I do a bit of
programing
> > and would love to help make it so home dish owners could do this.
Is it
> > possible? What would it take? Does the dish have to follow a spot
or
> > can it sweep the sky from a fixed position? If this is possible it
> > could add a million listeners to the system.
> >
> > Bill T.
> >
> > The Doctor Responds:
> > Absolutely, Bill! Parasitic SETI with a home satellite TV dish is
not
> > only feasilble, it's widely practiced. A second feedhorn and preamp
> > assembly are mounted next to the C-band horn/LNB at the apex of the
> > dish (see Figure 2 of this article). This assembly feeds the rest
of a
> > SETI system (see our online Tech Manual). You can then sweep out
the
> > sky, as described here. And yes, a million participants would be
nice,
> > but our goal is a more modest 5000 stations.
> > _____
> > http://www.setileague.org/askdr/parasite.htm
> >
> > I believe they are referring to the 6 ft. backyard type antennas,
> > judging from the linked images on the page. But could the roof
mounted
> > DirectTV and Dish Network type antennas be used for SETI?
> > The mentioned extra equipment are an extra feedhorn and a
> > preamplifier. The feedhorn can made cheaply but the preamp seems
> > expensive. If these preamps were mass produced for this purpose
could
> > their per item cost be brought under $50?
> > I'm envisionig a government agency such as NSF, or a scientically

> > interested billionaire, paying satellite TV companies to attach
this
> > extra equipment to their satellite dishes. Say $100 million is
> > earmarked for the program. Then you would want the extra cost to be
> > under $100 for each dish for say 1,000,000 subscribers. Judging
from
> > the diagram in the online Tech Manual linked to on the page, the
other
> > equipment should be doable by the equipment that comes with the
> > satellite TV system. Computer processing would be done separately
at a
> > central location.
> > If you had a 1,000,000 of these .5 meter wide antennas it would
have
> > the detection sensitivy of a single antenna 500 meters wide.
> > Bob Clark

124. AutoTracker??

Newsgroup: rec.radio.amateur.space
Date: 2005-02-11 20:24:30 UTC
From: Dennis Kaylor <k4oxg@tampabay.rr.com>
Message-ID: <2w8Pd.62533$JF2.43449@tornado.tampabay.rr.com>
Source record: 2188

hello all
does anyone know what happen to auto tracker Satellite tracking hardware
company>?
http://endeavour-usa.com/autotracker.htm
i am really interested in this controller but no one answers email and
the telephone number has been disconnected
so does anyone know if someone bought him out and still offering this
controller or
does anyone have a used one they wish to sell?
or does anyone have a better solution? i am currently using a Labjack
and am not happy with it
let me know what you know
thanks

125. JESUS CHRIST WENT TO THE CROSS SO YOU CAN GO TO HEAVEN - The good news is that God came from Heaven to earth in the person of Jesus Christ over 2000 years ago and died for our past, present and future sins(misdeeds). He was born in the land of Israel supernaturally to a virgin Jewish woman named Mary. He lived a sinless life for thirty-three years and then sacrificed His sinless blood and died on a cross to pay the death penalty for our sins.....

Newsgroup: rec.radio.amateur.space
Date: 2005-02-12 18:14:35 UTC
From: Evangelist_2005@sbcglobal.net
Message-ID: <1108232075.133445.58310@f14g2000cwb.googlegroups.com>
Source record: 2189

Good News!

Do you know how simple it is to go to Heaven after this life has ended?

The good news is that God came from Heaven to earth in the person of Jesus Christ over 2000 years ago and died for our past, present and future sins(misdeeds). He was born in the land of Israel supernaturally to a virgin Jewish woman named Mary. He lived a sinless life for thirty-three years and then sacrificed His sinless blood and died on a cross to pay the death penalty for our sins.

After Jesus died He rose from the dead three days later as He said He would. The Holy Bible also tells us that Jesus Christ ascended into Heaven and that all who accept Him as their Lord and Saviour will live forever with Him in Heaven where there is no more death, sorrow, sickness and pain.

The Holy Bible very clearly explains how simple it is to be saved and on your way to Heaven, "For if you confess with your mouth, "Jesus is Lord," and believe in your heart that God raised him from the dead, you WILL BE SAVED." (Romans 10:9)

You can be saved right now and on your way to Heaven if you will open your heart to Jesus and pray the following prayer:

Dear Jesus Christ, I want to be saved so that I can have a home in Heaven when I die. I agree with You that I am a sinner. I believe You love me and want to save me. I believe that You bled and died on the cross to pay the penalty for my sins. I believe that You rose from the dead. Please forgive my sins and come into my heart and be my Lord and Saviour. Thank You Lord Jesus Christ for forgiving me and saving me through Your merciful grace. Amen.

You are now a Christian if you said the prayer and allowed
God to save you. Welcome to the family of God.

If you decide to wait till later you may die before you get
another chance to be saved because none of us knows
exactly when we will die.

Have a great day!
Internet Evangelist R.L. Grossi

Free Online Bible
http://www.biblegateway.com

Free Online Movies
http://www.tbn.org/index.php/8/1.html

Animation
http://www.gieson.com/Library/projects/animations/walk/index.html

The Passion Of The Christ
http://www.worshipmusic.com/0310263670.html

Beware Of Cults
http://www.carm.org/cults/cultlist.htm

About Hell
http://www.equip.org/free/DH198.htm

Is Jesus God?
http://www.powertochange.com/questions/qna2.html

126. vor, altimeter, 100 feet of carbon fiber cloth

Newsgroup: rec.radio.amateur.space
Date: 2005-02-12 18:52:34 UTC
From: y020181sailboat@yahoo.com
Message-ID: <1108234354.903450.164700@c13g2000cwb.googlegroups.com>
Source record: 2190
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.space

trying to get rid of..... tried selling at ebay ....yours for
free....... pay for shipping

vor, altimeter, 100 feet of carbon fiber cloth

the cloth is new and the vor and altimeter is 10 years old.....

email y020181sailb...@yahoo.com(no spam)

google: vacation rentals maui retreat

no spam

127. Re: Could DirecTV satellite dishes be used for the Square Kilometer Array - and a more radical proposal[Re: Can DirectTV-type satellite dishes be used for SETI?]

Newsgroup: rec.radio.amateur.space
Date: 2005-02-13 00:26:40 UTC
From: Rob Dekker <rob@verific.com>
Message-ID: <49xPd.3525$lz5.574@newssvr24.news.prodigy.net>
Source record: 2191
Cross-posted to: sci.astro.seti,sci.astro,rec.radio.amateur.space,sci.physics

"Joseph Lazio" <jlazio@adams.patriot.net> wrote in message
news:ll3bw46tvl.fsf@adams.patriot.net...
>>>>> "RD" == Rob Dekker <rob@verific.com> writes:
>
> RD> I don't want to sound negative, but your plan is really not an
> RD> alternative or even competition for the SKA. Other people already
> RD> commented on many yet unresolved issues :
> RD> [...] - Cost is not only in the receiving elements. Cost
> RD> calculation would need to include the entire system.
>
> Indeed, there is considerable concern about the 12-m dishes proposed
> by the U.S. and Indian groups for exactly this reason. The 12-m
> dishes and associated electronics have costs that are similar to other
> proposals. There are some people, though, who worry that it will be
> impossible to process the data from an array composed of 12-m dishes
> because there won't be enough computing power, even in 2020.
>

Mmm. That would surprise me (that there would not be enough computing power).

The amount of computing power to create (compute) a phased single beam from an
array roughly linear with the amount of elements to be 'phase-correlated'.

The ATA is planned to have 350 elements (of 6m dish).
The SKA would plan to have 3300 elements (of 12m dishes) .

So that is only a factor of 10 more elements than the ATA.
In terms of Moore's law, a factor 10 in computing power is achieved in roughly 2.5 years.
This means that if SKA is completed 2 1/2 years after ATA, the system w.r.t.
computing power would cost the same as the same system on a full operational ATA.

ATA is planned to have cost about $30-40M upon competion, so I don't see that
the computing power available for the SKA would be a limiting factor (either technology or
cost).

Rob

> --
> Lt. Lazio, HTML police | e-mail: jlazio@patriot.net
> No means no, stop rape. | http://patriot.net/%7Ejlazio/
> sci.astro FAQ at http://sciastro.astronomy.net/sci.astro.html

128. Re: vor, altimeter, 100 feet of carbon fiber cloth

Newsgroup: rec.radio.amateur.space
Date: 2005-02-13 00:58:36 UTC
From: john_g <john_g@cibolo.com>
Message-ID: <1108256316.353813.172450@o13g2000cwo.googlegroups.com>
Source record: 2192
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.space

I have some use for the cloth. Please contact me by emailing this
address without spaces and @ substituted at jg (at) c ib
ol o.com

John Griessen
Austin TX

129. Re: Could DirecTV satellite dishes be used for the Square Kilometer Array - and a more radical proposal[Re: Can DirectTV-type satellite dishes be used for SETI?]

Newsgroup: rec.radio.amateur.space
Date: 2005-02-13 02:08:50 UTC
From: greg.hennessy@tantalus.cox.net
Message-ID: <cumcrimbr1@tantalus.no-ip.org>
Source record: 2193
Cross-posted to: sci.astro.seti,sci.astro,rec.radio.amateur.space,sci.physics

```
In article <49xPd.3525$lz5.574@newssvr24.news.prodigy.net>,
Rob Dekker <rob@verific.com> wrote:
> So that is only a factor of 10 more elements than the ATA.

But a factor of 100 more baselines.
```

130. Re: Could DirecTV satellite dishes be used for the Square Kilometer Array - and a more radical proposal[Re: Can DirectTV-type satellite dishes be used for SETI?]

Newsgroup: rec.radio.amateur.space
Date: 2005-02-14 21:18:28 UTC
From: willner@cfa.harvard.edu
Message-ID: <421115a4$1@cfanews.cfa.harvard.edu>
Source record: 2194
Cross-posted to: sci.astro.seti,sci.astro,rec.radio.amateur.space,sci.physics

> >>>>> "RD" == Rob Dekker <rob@verific.com> writes:
> RD> I don't want to sound negative, but your plan is really not an
> RD> alternative or even competition for the SKA. Other people already
> RD> commented on many yet unresolved issues :
> RD> [...] - Cost is not only in the receiving elements. Cost
> RD> calculation would need to include the entire system.

In article <ll3bw46tvl.fsf@adams.patriot.net>,
Joseph Lazio <jlazio@adams.patriot.net> writes:
> Indeed, there is considerable concern about the 12-m dishes proposed
> by the U.S. and Indian groups for exactly this reason. The 12-m
> dishes and associated electronics have costs that are similar to other
> proposals. There are some people, though, who worry that it will be
> impossible to process the data from an array composed of 12-m dishes
> because there won't be enough computing power, even in 2020.

Joe is an expert and can correct me if I have something wrong here,
but I think it might be useful to point out some of the qualitative
issues.

For an interferometer, the point-source sensitivity depends only on
collecting area, not on the number of antennas. That would favor
large numbers of small antennas, but... well, there's always a "but,"
isn't there?

First of all, in order to calibrate the interferometer, you have to
detect bright point sources ("calibrators") _on every baseline_.
That means with every pair of antennas. And you have to do it faster
than the atmospheric phase changes, which is typically tens of
minutes, depending on frequency. This sets a minimum size for your
antennas, typically several meters depending on operating frequency.

Second, receivers aren't free, and every antenna has to have one.
For a major facility such as the SKA, you want to work at multiple
frequencies, so every antenna needs several receivers. I haven't
priced receivers lately, but I'd guess prices in the 10's to 100's of
thousand dollars might be in the ballpark. This pushes you to larger
antennas, but larger antennas cost more per unit collecting area than
smaller ones. One estimate I've seen is that the antenna cost goes
as the 2.5 power of diameter. This isn't a law of nature, but the
practical number won't be too far from that. If the receiver price
is A, and the antenna price is B*d^2.5, the price per unit area goes

like
A/d^2 + B*d^0.5
This function rises at large and small values of d and has a minimum at some intermediate value. That cost minimum is the size you want to make your antennas, independent of how many of them you buy. Of course receiver performance and cost aren't fixed numbers. You could buy cheap receivers, accept poor performance, and make up for it by buying lots more antennas and receivers. This is another optimization problem, but in all the studies I've seen, it turns out best to pay more for good receivers. Observing time goes as the square of system temperature, and having crappy receivers makes the calibrator problem worse.

A third issue is the one RD and Joe mention: correlator cost. Cost ought to go roughly linearly with number of baselines, which for N antennas is N*(N-1)/2. This pushes towards fewer but larger antennas.

A fourth issue is primary beam size. The size of the field of view you can map at one time with a single receiver on each antenna goes inversely as the size of the antennas. This favors small antennas and more of them.

There are also technical issues such as sidelobes and shielding. You don't want any part of the antenna beam to "see" the ground. I am no expert but would expect these issues to favor large antennas or at least ones larger than a few meters in size.

As you can see, the tradeoffs are complicated. I expect the interferometer designers know about cheap, mass-produced antennas and will use them if they represent the best solution. It seems to me unlikely that they do.

--
Steve Willner Phone 617-495-7123 swillner@cfa.harvard.edu
Cambridge, MA 02138 USA
(Please email your reply if you want to be sure I see it; include a valid Reply-To address to receive an acknowledgement. Commercial email may be sent to your ISP.)

131. Re: Could DirecTV satellite dishes be used for the Square Kilometer Array - and a more radical proposal[Re: Can DirectTV-type satellite dishes be used for SETI?]

Newsgroup: rec.radio.amateur.space
Date: 2005-02-15 00:34:55 UTC
From: Rob Dekker <rob@verific.com>
Message-ID: <PsbQd.86$DC6.6@newssvr14.news.prodigy.com>
Source record: 2195
Cross-posted to: sci.astro.seti,sci.astro,rec.radio.amateur.space,sci.physics

Thanks for a good overview of trade-offs for phased arrays Steve !

"Steve Willner" <willner@cfa.harvard.edu> wrote in message
news:421115a4$1@cfanews.cfa.harvard.edu...
[....]
> Joe is an expert and can correct me if I have something wrong here,
> but I think it might be useful to point out some of the qualitative
> issues.
>
[....]
> A third issue is the one RD and Joe mention: correlator cost. Cost
> ought to go roughly linearly with number of baselines, which for N
> antennas is N*(N-1)/2. This pushes towards fewer but larger
> antennas.

I'm not a total expert in this field, but know enough to be dangerous..:)

If I'm not mistaken, to phase correlate N elements, you do not need
to phase-correlate all N^2 baselines, but (after time/phase-adjusting each of the
individual N signals to intended beam direction), you can simply create a correlator tree
of 2->1 phase correlators. The tree would then consist of N correlators,
which counts for linear complexity of computation power.

I could be off with this, but I seem to remember this from college (long ago).

Question for Joe : Which part of the SKA system would be the bottleneck in
computational effort, and create a problem even in 2020 ?

Rob

132. Yaesu G-1000 rotor pinout?

Newsgroup: rec.radio.amateur.space
Date: 2005-02-15 06:25:12 UTC
From: Jabi Aguirre <ea2aru@euskalnet.net>
Message-ID: <cus4ft$7al1@eui1nw.euskaltel.es>
Source record: 2196

Any have the correct pinout for the G-1000? It have 6 pins in the rotor.
Regards de Jabi, EA2ARU.

133. Re: Can DirectTV-type satellite dishes be used for SETI?

Newsgroup: rec.radio.amateur.space
Date: 2005-02-15 08:20:09 UTC
From: Matt Giwer <matt@tampabay.REMover.rr.com>
Message-ID: <ZgiQd.33788$pc5.5440@tornado.tampabay.rr.com>
Source record: 2197
Cross-posted to: sci.astro.seti,sci.astro,rec.radio.amateur.space,sci.physics

rgregoryclark@yahoo.com wrote:
> I was interested to read this on the Seti League web site:
>
> _____
> Parasitic SETI
> Dear Dr. SETI:
> As a Satellite dish owner and a strong interest in SETI, I was
> wondering if anything is available to allow the home satellite dish
> owner to 'search' when he is not watching TV. I do a bit of programing
> and would love to help make it so home dish owners could do this. Is it
> possible? What would it take? Does the dish have to follow a spot or
> can it sweep the sky from a fixed position? If this is possible it
> could add a million listeners to the system.

I talked about this months ago. Forming a beam, antenna gain, requires knowledge of the phase angle
differences between the sensors.

The bottom line is you cannot aggregate dishes without both

1) relative location of all dishes to each other to a fraction of a wavelength

1a) data transmission phase lag = 0 after compensation

2) tolerances in the receiver phase being to equally high tolerances

It is feasable if the combination of 1 and 2 do not result in more than about 1/36th wavelength
error. The more it deviates from that the less useful. 1/36th would cover about a 10 degree circle
in the sky. And that would indicate the array gain, roughly log(180^2/10^2). At 1/4 wavelength error
it is log(180^2/90^2) and a 1/2 wavelength error it is an antenna gain of log(1).

Maybe when the European GPS goes up and if it can be used seamlessly with the present US system it
might be possible to get accuracies of a few inches which is way to great. But even if perfect
sending the date to be aggregated depends upon the delays along the way from sender to inches in
difference in the cable and fiber lines being known to the fraction of a wavelength. If installers
do not have the exact measure of the length of cable and fiber used it all goes to shit.

And then there is the impossible job of calibrating them all.

--
Security at presidential press conferences is so good
a man can use a fake name and pass the background
check. Or are there no background checks?
-- The Iron Webmaster, 3380

134. Re: Can DirectTV-type satellite dishes be used for SETI?

Newsgroup: rec.radio.amateur.space
Date: 2005-02-15 08:58:35 UTC
From: rgregoryclark@yahoo.com
Message-ID: <1108457915.318093.66970@z14g2000cwz.googlegroups.com>
Source record: 2198
Cross-posted to: sci.astro.seti,sci.astro,rec.radio.amateur.space,sci.physics

Matt Giwer wrote:
> rgregoryclark@yahoo.com wrote:
> > I was interested to read this on the Seti League web site:
> >
> > _____
> > Parasitic SETI
> > Dear Dr. SETI:
> > As a Satellite dish owner and a strong interest in SETI, I was
> > wondering if anything is available to allow the home satellite dish
> > owner to 'search' when he is not watching TV. I do a bit of
programing
> > and would love to help make it so home dish owners could do this.
Is it
> > possible? What would it take? Does the dish have to follow a spot
or
> > can it sweep the sky from a fixed position? If this is possible it
> > could add a million listeners to the system.
>
>
>
> I talked about this months ago. Forming a beam, antenna gain,
requires knowledge of the phase angle
> differences between the sensors.
>
> The bottom line is you cannot aggregate dishes without both
>
> 1) relative location of all dishes to each other to a fraction of a
wavelength
>
> 1a) data transmission phase lag = 0 after compensation
>
> 2) tolerances in the receiver phase being to equally high
tolerances
>
> It is feasable if the combination of 1 and 2 do not result in more
than about 1/36th wavelength
> error. The more it deviates from that the less useful. 1/36th would
cover about a 10 degree circle
> in the sky. And that would indicate the array gain, roughly
log(180^2/10^2). At 1/4 wavelength error
> it is log(180^2/90^2) and a 1/2 wavelength error it is an antenna
gain of log(1).
>

> Maybe when the European GPS goes up and if it can be used seamlessly with the present US system it
> might be possible to get accuracies of a few inches which is way to great. But even if perfect
> sending the date to be aggregated depends upon the delays along the way from sender to inches in
> difference in the cable and fiber lines being known to the fraction of a wavelength. If installers
> do not have the exact measure of the length of cable and fiber used it all goes to shit.
>
> And then there is the impossible job of calibrating them all.
>
> --
> Security at presidential press conferences is so good
> a man can use a fake name and pass the background
> check. Or are there no background checks?
> -- The Iron Webmaster, 3380

Methods of fixing your position within millimeters using GPS exist as long as you can make a comparison to the GPS signals received at a site whose position is known within millimeters. This precisely known site can be kilometers away. This is used in surveying for example:

CARRIER-PHASE TRACKING
"Carrier-phase tracking provides for a more accurate range resolution due to the short wavelength (about 19 centimeters for L1 and 24 centimeters for L2) and the ability of a receiver to resolve the carrier phase down to about 2 millimeters. This technique has primary application to engineering, topographic, and geodetic surveying and may be employed with either static or kinematic surveys. There are several techniques that use the carrier phase to determine a station's position. These include static, rapid-static, kinematic, stop-and-go kinematic, pseudokinematic, and on-the-fly (OTF) kinematic/Table 8-4 lists these techniques and their required components, applications, and accuracies."
http://cartome.org/FM3-34/Chapter8.htm

This would suffice for centimeter wavelengths.

Bob Clark

135. Re: Could DirecTV satellite dishes be used for the Square Kilometer Array - and a more radical proposal[Re: Can DirectTV-type satellite dishes be used for SETI?]

Newsgroup: rec.radio.amateur.space
Date: 2005-02-15 13:44:33 UTC
From: Joseph Lazio <jlazio@adams.patriot.net>
Message-ID: <llr7jidjjy.fsf@adams.patriot.net>
Source record: 2199
Cross-posted to: sci.astro.seti,sci.astro,rec.radio.amateur.space,sci.physics

>>>>> "RD" == Rob Dekker <rob@verific.com> writes:

RD> Thanks for a good overview of trade-offs for phased arrays Steve !

RD> "Steve Willner" <willner@cfa.harvard.edu> wrote in message
RD> news:421115a4$1@cfanews.cfa.harvard.edu... [....]
>> Joe is an expert and can correct me if I have something wrong here,
>> but I think it might be useful to point out some of the qualitative
>> issues.
RD> [....]

Steve's post certainly captured most of the essential details. In
particular, the US proposal for the SKA involves 12-m dishes because,
with current knowledge, these are thought to be at the minimum in the
"cost curve." That is, a 12-m dish provides a good balance between
the costs of obtaining antennas and obtaining receivers.

>> A third issue is the one RD and Joe mention: correlator cost. Cost
>> ought to go roughly linearly with number of baselines, which for N
>> antennas is N*(N-1)/2. This pushes towards fewer but larger
>> antennas.

RD> I'm not a total expert in this field, but know enough to be
RD> dangerous..:)

RD> If I'm not mistaken, to phase correlate N elements, you do not
RD> need to phase-correlate all N^2 baselines, but (after
RD> time/phase-adjusting each of the individual N signals to intended
RD> beam direction), you can simply create a correlator tree of 2->1
RD> phase correlators. The tree would then consist of N correlators,
RD> which counts for linear complexity of computation power.

No, one does have to multiply the signals from all N antennas
together, which is roughly an N^2 problem. The issue in radio
astronomical interferometry is that the "visibility" or "correlation
coefficient" is a measure of the Fourier transform of the sky
brightness. Every unique pair of antennas gives one "visibility," so
one wants to obtain all possible visibilities from the N antennas.

RD> Question for Joe : Which part of the SKA system would be the
RD> bottleneck in computational effort, and create a problem even in
RD> 2020 ?

Actually, the correlator, as difficult as it is, may not be the limiting factor for the SKA computation. Some people think they know today how to build an SKA-level correlator.

The most prominent concern has been how does one make an image? The SKA is envisioned as having a large field of view (e.g., 1 deg^2 at 1 GHz, and some people are concerned that that's not large enough). In order to make high-quality images, one probably has to image that entire field of view with something approaching 0.1 arcsecond resolution. Thus, a single image would be something like 10,000 x 10,000 pixels in size, and that's only for a single frequency. One probably has to utilize multiple frequencies simultaneously, in order to defeat some other effects. Moreover, current processing of radio interferometric images is an iterative process, in which one makes an image, corrects it for certain effects, makes a new image, improves the corrections, makes a new image, ...

There's a memo floating around discussing all of these aspects of processing. IIRC, the conclusion was that the processing power required to make high-dynamic range images scaled as the dish diameter (which sets the field of view) as something like D^6 or D^8. Thus, all other things being equal, just changing from the 25-m VLA dishes to the proposed 12-m US SKA dishes would increase computation by a factor of 64 to 256, and that's even without taking into account the much larger number of antennas.

I should say that not everybody agrees with this analysis, but it is recognized that the computational aspects of the SKA may be significant.

--
Lt. Lazio, HTML police | e-mail: jlazio@patriot.net
No means no, stop rape. | http://patriot.net/%7Ejlazio/
sci.astro FAQ at http://sciastro.astronomy.net/sci.astro.html

136. Re: Can DirectTV-type satellite dishes be used for SETI?

Newsgroup: rec.radio.amateur.space
Date: 2005-02-15 21:03:20 UTC
From: david@djwhome.demon.co.uk
Message-ID: <T1108504993@djwhome.demon.co.uk>
Source record: 2100
Cross-posted to: sci.astro.seti,sci.astro,rec.radio.amateur.space,sci.physics

In article <ZgiQd.33788$pc5.5440@tornado.tampabay.rr.com>,
Matt Giwer <matt@tampabay.REMover.rr.com> wrote:

> It is feasable if the combination of 1 and 2 do not result in more than about 1/36th wavelength

That's about 6 times better than the requirements for dishes [A]. I don't know where you got that figure from, but it is wrong.

> error. The more it deviates from that the less useful. 1/36th would cover about a 10 degree circle

Er! 1/36th in the beam direction would cause a deviation of the order of (in radians) 1/(36 * <baseline length in wavelengths>) in the direction of the individual fringes. The direction in which the fringes are intended to coincide would only see a small reduction in in-phase signal.

Whilst I strongly suspect that differential and carrier phase will not solve the problem, it is nothing like as bad as you suggest.

> in the sky. And that would indicate the array gain, roughly log(180^2/10^2). At 1/4 wavelength error

If the peak to peak error is 1/4 wave, in the worst possible configuration, the array gain will be degraded by 3dB.

[A] Generally the profile accuracy suggested for dishes is 1/10th to 1/12th of a wavelength, but the phase error is doubled by the reflection.

137. Re: Yaesu G-1000 rotor pinout?

Newsgroup: rec.radio.amateur.space
Date: 2005-02-16 03:36:33 UTC
From: James <jnipperxxx@nospamfdn.com>
Message-ID: <8KmdnaLsY4xflo_fRVn-gw@comcast.com>
Source record: 2101

A Google search found the following site where you can download the entire
Manual for this rotor:

http://www.mods.dk/view.php?ListManuals=yaesu

Good Luck !!

73 de Jim K4PYT Florida

138. Re: Can DirectTV-type satellite dishes be used for SETI?

Newsgroup: rec.radio.amateur.space
Date: 2005-02-16 06:35:59 UTC
From: Matt Giwer <matt@tampabay.REMover.rr.com>
Message-ID: <jRBQd.79846$JF2.31490@tornado.tampabay.rr.com>
Source record: 2102
Cross-posted to: sci.astro.seti,sci.astro,rec.radio.amateur.space,sci.physics

David Woolley wrote:
> In article <ZgiQd.33788$pc5.5440@tornado.tampabay.rr.com>,
> Matt Giwer <matt@tampabay.REMover.rr.com> wrote:

>> It is feasable if the combination of 1 and 2 do not result in more than about 1/36th wavelength

> That's about 6 times better than the requirements for dishes [A]. I don't
> know where you got that figure from, but it is wrong.

A dish is summing power. You don't care much. It could be less if the receiver at the focal point
were larger but at some point the receiver blocks too much incoming signal.

In a distributed array you must have phase information so you can determine the direction it is
pointing. If we assume these dishes are all pointing with zero error at the satellite 32,000 miles
up from all over the US (for example) they are all pointing at a different point at infinity. So if
you want to look at a point at astronomical distances you have to correct for the satellite aim point.

Consider a dozen widely spaced antenna pointed at the same satellite. They go on to point to widely
different points in space as they "pass through" the satellite. That gives you no gain at all, it
does not not improve the signal to noise ratio.

To take the data from all of them and sum the data from one point in the sky, Tau Ceti the odds on
favorie, you have to phase shift the data from all of them such that you are only considering the
part of the signal that corresponds to that direction.

Because television sensors all converge on a very local point 32,000 miles away (36,000 mile orbit
from the center and varying by latitude) the "aim point" rapidly diverges beyond the satellite. To
recombine that noise into useful data you have to know how to "point" it to a single direction to
combine signal to exceed the noise.

Given the reality that only the dishes in a very small town can be considered to be pointing to
roughly the same point in deep space there is no gain of interest as the smaller the town

the
smaller the deep space area and the lesser the gain.

Two dishes one mile apart exactly pointing to the same point 32,000 miles up point to greatly
different places in deep space.

--
If you sue and act as your own attorney while the other side
hires Alan Derschowitz, only winning is noteworthy.
-- The Iron Webmaster, 3356

139. Re: Can DirectTV-type satellite dishes be used for SETI?

Newsgroup: rec.radio.amateur.space
Date: 2005-02-16 06:46:15 UTC
From: Matt Giwer <matt@tampabay.REMover.rr.com>
Message-ID: <X_BQd.87098$qB6.15562@tornado.tampabay.rr.com>
Source record: 2103
Cross-posted to: sci.astro.seti,sci.astro,rec.radio.amateur.space,sci.physics

rgregoryclark@yahoo.com wrote:

> Methods of fixing your position within millimeters using GPS exist as
> long as you can make a comparison to the GPS signals received at a site
> whose position is known within millimeters. This precisely known site
> can be kilometers away. This is used in surveying for example:

This is a good start. Is it affordable to calibrate every installation? These sites are by definition on houses and such and installed by people who know only how to do that. So each has to
be properly calibrated.

> CARRIER-PHASE TRACKING
> "Carrier-phase tracking provides for a more accurate range resolution
> due to the short wavelength (about 19 centimeters for L1 and 24
> centimeters for L2) and the ability of a receiver to resolve the
> carrier phase down to about 2 millimeters. This technique has primary
> application to engineering, topographic, and geodetic surveying and
> may be employed with either static or kinematic surveys. There are
> several techniques that use the carrier phase to determine a station's
> position. These include static, rapid-static, kinematic, stop-and-go
> kinematic, pseudokinematic, and on-the-fly (OTF) kinematic/Table 8-4
> lists these techniques and their required components, applications,
> and accuracies."
> http://cartome.org/FM3-34/Chapter8.htm

> This would suffice for centimeter wavelengths.

BUT the transmission of the data back to the processing source has to be perfect. It cannot be by
raw cable as that would require a separate network and if it existed people would use cable for TV
not satellites. It has to be processed data going back and then we have local computers and data
packets and delays all piling up. Most of those can be overcome. Even if there were raw data fibers
going back to the processor, the length of the fiber path has to be known exactly to preserve phase
information.

--
What is a conspiracy theorist when the US government believed
in an insane conspiracy by Iraq against the US?
-- The Iron Webmaster, 3366

140. Re: Can DirectTV-type satellite dishes be used for SETI?

Newsgroup: rec.radio.amateur.space
Date: 2005-02-16 22:09:15 UTC
From: david@djwhome.demon.co.uk
Message-ID: <T1108591407@djwhome.demon.co.uk>
Source record: 2104
Cross-posted to: sci.astro.seti,sci.astro,rec.radio.amateur.space,sci.physics

In article <jRBQd.79846$JF2.31490@tornado.tampabay.rr.com>,
Matt Giwer <matt@tampabay.REMover.rr.com> wrote:

> A dish is summing power. You don't care much. It could be less if the receiver at the focal point

Mathematically (and because of the linearity of EM fields with respect to superimposition, dishes sum field (volts/metre) not power. In fact dishes can be treated as the limiting case of phased arrays, with infinitesimal elements (and free space phasing lines); that's how you work out the beam pattern to get the approximate gaussian (the actual one for a circular aperture is, I believe, a Bessel function). Using analogue delay lines for phasing is standard for stacked arrays and, with switchable loops, even for some electronically steerable ones. (Dishes do combine power overall, but so do delay line phased arrays, and you can only work out beam patterns by considering the phased integration of the fields.)

However, one doesn't need to think about dishes to demonstrate that even quarter wave peak to peak along the beam direction only compromises by 3dB. (Perpendicular to the beam, there is no effect.)

The worst case configuration is with half exactly an eighth wave high and half an eighth wave low. The in-phase components follow a cosine pattern and are + and - 45 degrees. Cos (45 degrees) is sqrt (2). The out of phase components follow a sine pattern and cancel. Squaring to get power, one gets a factor of 2, i.e. 3dB. Note that I haven't made any assumptions about the array size, here, except that the individual element capture areas don't overlap.

Whilst I have severe doubts as to the ability to phase to even this accuracy, it is 9 times coarser than the 1/36th you were claiming, and has only halved the effective number of elements.

141. TAPR Trakbox unbuilt kit on ebay

Newsgroup: rec.radio.amateur.space
Date: 2005-02-18 22:59:13 UTC
From: ayooper <yuuper@chartermi.net>
Message-ID: <AuuRd.1155$PF2.505@fe04.lga>
Source record: 2105

This kit is unbuilt. Still in the original box. It will point your antennas
to automatically track a satellite selected from it's internal database. It
is a standalone unit after it is configured with a pc. Check it out at:
http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&category=4671&item=5753084092&rd=1&ssPageNam
e=WDVW

142. Re: Can DirectTV-type satellite dishes be used for SETI?

Newsgroup: rec.radio.amateur.space
Date: 2005-02-19 03:43:54 UTC
From: Matt Giwer <matt@tampabay.REMover.rr.com>
Message-ID: <_ByRd.94612$qB6.77803@tornado.tampabay.rr.com>
Source record: 2106
Cross-posted to: sci.astro.seti,sci.astro,rec.radio.amateur.space,sci.physics

David Woolley wrote:
> In article <jRBQd.79846$JF2.31490@tornado.tampabay.rr.com>,
> Matt Giwer <matt@tampabay.REMover.rr.com> wrote:

>> A dish is summing power. You don't care much. It could be less if the receiver at the focal point

> Mathematically (and because of the linearity of EM fields with respect to
> superimposition, dishes sum field (volts/metre) not power.

Correct. Sonar background myself. Never did quite learn to think in E-M terms for posting purposes.

> In fact dishes
> can be treated as the limiting case of phased arrays, with infinitesimal
> elements (and free space phasing lines); that's how you work out the beam
> pattern to get the approximate gaussian (the actual one for a circular
> aperture is, I believe, a Bessel function). Using analogue delay lines
> for phasing is standard for stacked arrays and, with switchable loops,
> even for some electronically steerable ones. (Dishes do combine power
> overall, but so do delay line phased arrays, and you can only work out
> beam patterns by considering the phased integration of the fields.)

> However, one doesn't need to think about dishes to demonstrate that even
> quarter wave peak to peak along the beam direction only compromises by
> 3dB. (Perpendicular to the beam, there is no effect.)

> The worst case configuration is with half exactly an eighth wave high and
> half an eighth wave low. The in-phase components follow a cosine pattern
> and are + and - 45 degrees. Cos (45 degrees) is sqrt (2). The out of phase
> components follow a sine pattern and cancel. Squaring to get power, one
> gets a factor of 2, i.e. 3dB. Note that I haven't made any assumptions
> about the array size, here, except that the individual element capture
> areas don't overlap.

> Whilst I have severe doubts as to the ability to phase to even this accuracy,
> it is 9 times coarser than the 1/36th you were claiming, and has only
> halved the effective number of elements.

And again correct. I was thinking in terms of a linear sensor array not an area sensor array. Area
would proportional to the square the linear accuracy required in the lesser direction. My error was
a hangover from my earliest work.

Regret the delay in responding.

--
TV networks cover news with the same stories in the same
amount of time and in the same order. There is no
evidence they are independent.
-- The Iron Webmaster, 3365

143. Re: Could DirecTV satellite dishes be used for the Square Kilometer Array - and a more radical proposal[Re: Can DirectTV-type satellite dishes be used for SETI?]

Newsgroup: rec.radio.amateur.space
Date: 2005-02-20 00:36:32 UTC
From: Rob Dekker <rob@verific.com>
Message-ID: <kYQRd.1656$DC6.845@newssvr14.news.prodigy.com>
Source record: 2107
Cross-posted to: sci.astro.seti,sci.astro,rec.radio.amateur.space,sci.physics

"Joseph Lazio" <jlazio@adams.patriot.net> wrote in message
[....]
> RD> I'm not a total expert in this field, but know enough to be
> RD> dangerous..:)
>
> RD> If I'm not mistaken, to phase correlate N elements, you do not
> RD> need to phase-correlate all N^2 baselines, but (after
> RD> time/phase-adjusting each of the individual N signals to intended
> RD> beam direction), you can simply create a correlator tree of 2->1
> RD> phase correlators. The tree would then consist of N correlators,
> RD> which counts for linear complexity of computation power.
>
> No, one does have to multiply the signals from all N antennas
> together, which is roughly an N^2 problem. The issue in radio
> astronomical interferometry is that the "visibility" or "correlation
> coefficient" is a measure of the Fourier transform of the sky
> brightness. Every unique pair of antennas gives one "visibility," so
> one wants to obtain all possible visibilities from the N antennas.

Might it be that we are talking about two different correlations..?

I was talking about a simple phase-correlator : accumulate signals
from all elements. In hardware, that is done with 'phase-splitters'.
(At least that's how I hooked my 4 loop-yagi's together back in the old days).
Antenna phase-splitters are passive devices which simply 'add' the electrical
field of multiple feed-points (or split them if you are transmitting).

For a (digitally sampled) antenna signal, these would be simply be 'adders'
which need to 'add' the signal value for each element for each sample.

For one beam, for 10Ghz sample rate (5 GHz bandwidth), and N elements,
you would need to do 10*10^9 * N additions per second (pretty large
amount of digital adders), but it is linear w.r.t. N.

I think you might have been talking about a smarter technique to do this work.

>
> RD> Question for Joe : Which part of the SKA system would be the
> RD> bottleneck in computational effort, and create a problem even in
> RD> 2020 ?
>
> Actually, the correlator, as difficult as it is, may not be the

> limiting factor for the SKA computation. Some people think they know
> today how to build an SKA-level correlator.
>
> The most prominent concern has been how does one make an image? The
> SKA is envisioned as having a large field of view (e.g., 1 deg^2 at 1
> GHz, and some people are concerned that that's not large enough). In
> order to make high-quality images, one probably has to image that
> entire field of view with something approaching 0.1 arcsecond
> resolution. Thus, a single image would be something like 10,000 x
> 10,000 pixels in size, and that's only for a single frequency. One
> probably has to utilize multiple frequencies simultaneously, in order
> to defeat some other effects. Moreover, current processing of radio
> interferometric images is an iterative process, in which one makes an
> image, corrects it for certain effects, makes a new image, improves
> the corrections, makes a new image, ...

Interesting...

>
> There's a memo floating around discussing all of these aspects of
> processing. IIRC, the conclusion was that the processing power
> required to make high-dynamic range images scaled as the dish diameter
> (which sets the field of view) as something like D^6 or D^8. Thus,
> all other things being equal, just changing from the 25-m VLA dishes
> to the proposed 12-m US SKA dishes would increase computation by a
> factor of 64 to 256, and that's even without taking into account the
> much larger number of antennas.
>
> I should say that not everybody agrees with this analysis, but it is
> recognized that the computational aspects of the SKA may be
> significant.
>
> --
> Lt. Lazio, HTML police | e-mail: jlazio@patriot.net
> No means no, stop rape. | http://patriot.net/%7Ejlazio/
> sci.astro FAQ at http://sciastro.astronomy.net/sci.astro.html

144. Re: Could DirecTV satellite dishes be used for the Square Kilometer Array - and a more radical proposal[Re: Can DirectTV-type satellite dishes be used for SETI?]

Newsgroup: rec.radio.amateur.space
Date: 2005-02-20 15:00:33 UTC
From: Joseph Lazio <jlazio@adams.patriot.net>
Message-ID: <llpsyv1dke.fsf@adams.patriot.net>
Source record: 2108
Cross-posted to: sci.astro.seti,sci.astro,rec.radio.amateur.space,sci.physics

>>>>> "RD" == Rob Dekker <rob@verific.com> writes:

RD> "Joseph Lazio" <jlazio@adams.patriot.net> wrote in message [....]

RD> If I'm not mistaken, to phase correlate N elements, you do not
RD> need to phase-correlate all N^2 baselines, but (...), you can
RD> simply create a correlator tree of 2->1 phase correlators. The
RD> tree would then consist of N correlators, which counts for linear
RD> complexity of computation power.

>> No, one does have to multiply the signals from all N antennas
>> together, which is roughly an N^2 problem. The issue in radio
>> astronomical interferometry is that the "visibility" or
>> "correlation coefficient" is a measure of the Fourier transform of
>> the sky brightness. Every unique pair of antennas gives one
>> "visibility," so one wants to obtain all possible visibilities from
>> the N antennas.

RD> Might it be that we are talking about two different
RD> correlations..?

Potentially. Your comment about a "tree" perhaps should have clued me in.

RD> I was talking about a simple phase-correlator : accumulate signals
RD> from all elements. In hardware, that is done with
RD> 'phase-splitters'. (At least that's how I hooked my 4 loop-yagi's
RD> together back in the old days).

I'd call that a beam former.

The Very Large Array (and other interferometers of its ilk) work by
combining the signals from all unique pairs of antennas.
Specifically, one takes the signals from antennas #1 and #2, multiples
them together, and then integrates for a short time. That's the
measured quantity, often called a "visibility" or "correlation
coefficient." One then repeats this for antennas #1 and #3, antennas
#1 and #4, #1 and #5, #1 and #6, ..., until one has made all unique
combinations from 27 antennas. (Those who enjoy math problems can try
to figure out how many such combinations there are. :)

To make it even more complicated, some of the designs for the Square
Kilometer Array (and the Low Frequency Array and the Long Wavelength
Array and others) contemplate using both beam formers and correlators.

Thus, one would start with a bunch of dipoles. The signals from a
"small" number of dipoles (e.g., 100) would be combined in the manner
you described. This produces a signal typically called a "station"
beam or "pod" beam. The signals from various stations (numbering
perhaps 100) are then combined by a correlator.

--
Lt. Lazio, HTML police | e-mail: jlazio@patriot.net
No means no, stop rape. | http://patriot.net/%7Ejlazio/
sci.astro FAQ at http://sciastro.astronomy.net/sci.astro.html

145. Just say NO to Bin Ladin!!!!

Newsgroup: rec.radio.amateur.space
Date: 2005-02-21 17:37:20 UTC
From: angelonmyshoulder61@yahoo.com
Message-ID: <1109007440.776751.196110@g14g2000cwa.googlegroups.com>
Source record: 2109

Hi all I am helping a friend promote a web site. You see a childhood friend of hers lost her husband at the World Trade Center on Sept. 11, 2001. She has run into some hard times and my freind wants to help her. So she came up with the idea to market Just say NO to Bin Ladin dartboards and punching bag covers. Not only is she going to donate part of the proceeds to her freind but an additional part of the proceeds will go to the Firemans Fund. If you could take the time to check out the web site it would be much appreciated!! The web site addy is:

http://www.angelonmyshoulder.4t.com

Thanks so much everyone!!

146. And yet an even more radical proposal.

Newsgroup: rec.radio.amateur.space
Date: 2005-02-21 20:24:20 UTC
From: Robert Clark <rgregoryclark@yahoo.com>
Message-ID: <1109017460.434188.272970@f14g2000cwb.googlegroups.com>
Source record: 2110
Cross-posted to: sci.astro.seti,sci.astro,rec.radio.amateur.space,sci.physics

Another possible problem is that I'm not even sure the receivers that
come with the satellite dishes can even detect frequencies other than
the 12 Ghz the satellites broadcast at.
In regard to the wavelengths that the .5 m antennas could usefully
collect, I've seen references that a dipole antenna should be a quarter
of the wavelength. Is this different for parabolic antennas?
I'm thinking perhaps you could simply attach flat metal dipoles to the
surface of the .5 meter antennas so they could collect megahertz
frequencies. Then at a quarter wavelength you could collect down to 2
meter wavelengths or 150 Mhz.
While we're at it, the thought of using dipoles, like TV antennas,
raises another possibility. You need receivers for these frequencies.
Where could we get large numbers of receivers already existing at these
frequencies? Inside TV's! Assuming we could solve the problem of
tranmitting the data to a central site (ultra wideband, broadband over
power-lines, amateur packet radio, etc.), we could have all new TV's
come installed with a circuit that transmits received signals to the
central site. The number of new TV's sold yearly worldwidde is 90
million. This would result in markedly larger numbers of possible
receivers even above the satellite TV approach.
There might be privacy issues with this idea however.

Bob Clark

Robert Clark wrote:
> A.) According to this article $1.4 billion dollars is earmarked to be
> spent on the Square Kilometer array with completion expected by 2015:
>
> Radio Astronomy Will Get a Boost With the Square Kilometer Array.
>
http://www.universetoday.com/am/publish/radio_astronomy_boost_ska.html?1592004
>
> As I stated below the primary extra components to be added to the
> DirecTV dishes to be used for radio astronomy are the feedhorn and
the
> preamp. The feedhorn is simply a metal pipe of little cost. The
> SetiLeague site lists sellers of specially made preamps for SETI
> search at $150. But these are handmade. From the low number of
circuit
> elements, I estimate that if mass produced at the millions of items
> level the price could come down in the range of $10 each.
> This site states the rate of growth of satellite TV subscribers is
at
> 4 million per year:

>
> Satellite TV Basics.
> http://www.satellitetv-hq.com/hqguides/satellite-tv-basics.html
>
> This means the *receivers* for the SKA system if using these
> satellite dishes could be installed in 1 year at an extra cost of $10
> x 4,000,000 = $40 million dollars. Note that the feedhorn and the
> preamp could be attached at manufacture would not cost more on
> installation labor. The installation is already paid for by the
> satellite TV subscribers. To pay for the extra cost for the added
> equipment you could simply add $1 extra per month to the subscriber
> rate. Then these 4 million, .5 meter wide dishes would have a total
> collecting area of a disk 2000 x .5 m = 1000m = 1km wide, the total
> collecting area expected for the SKA. Moreover this would have the
> advantage that an additional square kilometer of collecting area
would
> automatically be added every year over several years going by the
> present growth rate.
> You could also attach the extra equipment to the 25 million
satellite
> systems already installed in perhaps 4 or 5 years. The number of
> satellite TV subscribers worldwide was 60 million in 2003 and is
> expected to grow to 100 million by 2008:
>
> Digital Satellite TV Platforms Continue to Gain Subscribers, and
> Profits are on the Rise.
> http://www.instat.com/press.asp?ID=1171&sku=IN0401236MB
>
> If this many .5 meter antennas were networked together, they would
> have the collecting area of a single antenna 10,000 x .5 m = 5 km
> wide.
>
> Note that the idea of using over 50 million separate, stationary
> elements is one of the proposals being considered for the SKA
> architecture:
>
> Aperture Array (AA)
> http://www.skatelescope.org/pages/design_nl.htm
>
> This method of keeping the receiving antennas fixed while detection
> directions are determined electronically is called the phased array
> approach and has the advantage that many separate targets can be
> observed simultaneously. It also has the advantage that interfering
> local signals can be suppressed. However, the Aperture Array has
> antennas close together in a predetermined configuration with the
> positions precisely determined. How could this work for the randomly
> positioned satellite dishes?
> Methods of differential GPS and carrier phase synthesis now have the
> capability of determining position to within millimeters. The method
> compares the GPS signal between a precisely known site and an unknown

> site to locate the unknown site to within centimeters. Then a
> comparison is made in the actual phase of the signals received at the
> two sites to locate the unknown site to within millimeters:
>
> CARRIER-PHASE TRACKING
> "Carrier-phase tracking provides for a more accurate range resolution
> due to the short wavelength (about 19 centimeters for L1 and 24
> centimeters for L2) and the ability of a receiver to resolve the
> carrier phase down to about 2 millimeters. This technique has primary
> application to engineering, topographic, and geodetic surveying and
> may be employed with either static or kinematic surveys. There are
> several techniques that use the carrier phase to determine a
station's
> position. These include static, rapid-static, kinematic, stop-and-go
> kinematic, pseudokinematic, and on-the-fly (OTF) kinematic/Table 8-4
> lists these techniques and their required components, applications,
> and accuracies."
> http://cartome.org/FM3-34/Chapter8.htm
>
> This should be sufficient for keeping the signals for the millions
of
> antennas in phase up to perhaps 3 cm wavelength, 10 Ghz frequency.
> Timing synchronization can be obtained by synchronizing from the
> common signal received by the dishes from the satellite.
> The Argus telescope at Ohio State University (this is different from
> Project Argus operated by The Seti League) may provide a model for
how
> sensitive such a system can be operating from noisy populated areas:
>
> Newsgroups: sci.astro.seti
> From: Bob Dixon <dixo...@osu.edu>
> Date: Wed, 19 May 2004 12:49:02 -0400
> Subject: The Argus Telescope
>
http://groups-beta.google.com/group/sci.astro.seti/browse_frm/thread/54ddf1f29f629f20/
>
> Argus Expands the Search For Life.
> By Daniel Sorid
> posted: 03:30 pm ET
> 09 June 2000
> http://www.space.com/searchforlife/seti_argus_000609.html
>
> Note though that the continent wide satellite dish system will have
> an advantage over Argus in dismissing unwanted signals in that such
> signals would only be detected by a local group of antennas not the
> continent wide system.
>
> In mentioning an estimated price for this system, I emphasized the
> estimate was for the *receiving* part of the system. But of course
for

> such a system of separate receivers, it is just as important to
> combine and process the signals.
> In the thread for DirecTV being used for SETI, someone mentioned you
> might need to transfer 1 Gbps from each antenna for detections at 12
> Ghz. I seem to recall that analog signals can be tranferred in
greater
> density than digital signals. Perhaps the signal received by each
> antenna can be transmitted in analog form with a stamp indicating its
> location and time of origin.
> For examples of the data density required we could look at some
> examples of systems of separate antennas that have been used to give
> combined signals in *real time*:
>
> Astronomers Demonstrate a Global Internet Telescope.
> Date Released: Friday, October 08, 2004.
> http://www.spaceref.com/news/viewpr.html?pid=15251
>
> This produced data of 32 Mbits/second for each telescope for
> observations at 1.6 Ghz. So at 16 Ghz perhaps 320 Mbps might be
> expected for each antenna. The data was sent over a high-speed
> internet network available to universities that operates at gigabits
> per second. Within a few years, the data transfer rate is expected to
> reach tens of gigabits per second.
>
> And:
>
> Prototype SETI Antenna Array Will Help Radio Astronomers Too.
> Date Released: Wednesday, June 07, 2000.
> http://www.spaceref.com/news/viewpr.html?pid=1992
>
> This is of the Argus telescope at Ohio State University. The 64
> antennas here detect signals from 400 to 2000 Mhz. The antennas
> together produce 2.56 gigabytes per second, or 20.48 gigabits per
> second. So each telescope produces 320 Mbps. This article states that
> no physical connection could economically carry that much data over
> distance however this was written in 2000. Ultra wideband technology
> (mentioned below) now has that capability.
>
> For processing the data for the proposed SKA system, I expect the
> distributed computing system used by Set@Home to be used, wherein
> millions of computers take part in the calculations. As for how the
> data can be sent by the individual antennas, there are a few possible
> ways the signals could be combined.
>
> 1.)DirecTV offers a two-way broadband satellite internet service
> called DirecWay. This allows signals to be sent from the home
antennas
> back up to the transmitting satellite. However, this system currently
> has only a 100,000 subscribers in place. I want to use the millions
of

> subscribers using the satellite TV systems. I think a minor low-cost
> modification of the current TV antennas would also allow them to
> transmit to the satellites used for broadband internet service. (I
> don't think the satellites used for TV service can be used to receive
> signals.)
>
> 2.)Another possibility for transferring the data from each antenna
> might be to use military satellites currently used for surveillance
on
> radio transmissions, perhaps using satellites that were
decommissioned
> and are no longer used for sensitive military tasks.
>
> 3.)Possibly the techniques used with amateur packet radio could be
> used. Here radio links are used to setup data networks analogously to
> how the internet sets up data transfer networks using the TCP/IP
> protocols:
>
> N6GN's Microwave Link Page
> http://www.sonic.net/~n6gn/uwavelink/uwv.html
>
> INEXPENSIVE MULTI-MEGABAUD MICROWAVE DATA LINK
> http://www.sonic.net/~n6gn/hr89/uwvarticle.html
>
> 4.)Ultra wideband (UWB) promises gigabit data transfers over both
> cable and wireless connections and should be available this year
> (2005):
>
> New chipset promises gigabit broadband on cable and wireless.
> Rupert Goodwins
> ZDNet UK
> May 11, 2004, 15:20 GMT
> http://news.zdnet.co.uk/communications/0,39020336,39154271,00.htm
>
> Ultrawideband in 2005, but only in America
> Rupert Goodwins
> ZDNet UK
> February 19, 2004, 09:45 GMT
>
http://news.zdnet.co.uk/communications/wireless/0,39020348,39146644,00.htm
>
> Ultrawideband: Wireless Whoopee.
> 08:34 AM Oct. 09, 2004 PT
> "SAN FRANCISCO -- Think of it as Wi-Fi on steroids. On its way to
U.S.
> living rooms and maybe even automobiles is a new type of high-speed
> wireless connection that promises downloaded data rates of up to 1
> gigabit per second -- roughly 18.5 times the speed of Wi-Fi -- to
> personal computers and other devices.
> "This ultrawideband technology, which could become available in the

> next two years, also allows the devices to send data upstream to a
> network at 480 megabits per second."
>
http://www.wired.com/news/technology/0,1282,65297,00.html?tw=wn_tophead_3
>
> 5.)Some public utilities now collect their meter readings from radio
> transmitters attached to their meters. The data is collected by
> receiver on utility poles and then transmitted to a central site.
This
> method could be adapted to work for collecting the data from the
> separate antennas.
>
> 6.) The above methods would require that the data transmissions be on
> specified frequencies that will not be used for detections. However,
> another method might not have this limitation:
>
> Broadband Over Power Lines?
> 01:15 PM Feb. 09, 2003 PT
> "ST. LOUIS -- Coming to a home or office near you could be an
electric
> Internet: high-speed Web access via ubiquitous power lines, of all
> things, making every electrical outlet an always-on Web connection."
> http://www.wired.com/news/technology/0,1282,57605,00.html
>
> This is a new technique already being tested in small markets to
> provide interent service over power lines. The speed of transmission
> can be ramped up to 1 gigabits per second using ulta wideband
> technology.
>
> B.)This last leads me to another proposal for large scale separated
> antennas for radio astronomy: using the electrical wiring in
> households as radio antennas. Here's a post to
> rec.radio.amateur.antenna discussing this:
>
>
==========
> From: Ed Hare, W1RFI (w1rfi@arrl.net)
> Subject: Re: ISO info about using house wiring as a TV antenna
> Newsgroups: rec.radio.amateur.antenna
> Date: 2000-12-29 15:33:06 PST
>
> Richard Friday <tgirwf@bigfoot.com> wrote in message
> news:92j4h7$2b2$1@bob.news.rcn.net...
>
> > I know this post might be off-topic but could find no other
newsgroup that
> > had "antenna" in its name. I'd be most appreciative if someone
could point
> > to a more suitable discussion or other source of information.
> > I've seen advertised a device that claims to allow you to use the

> > electrical wiring of your house as a tv antenna. You plug this
device
> > into an outlet, and then use connections it provides as your tv
antenna.
> > I'm trying to find out if this actually works but have not been
able to
> > find any reviews.
>
> This device will receive some signals. However, house electrical
> wiring is
> not a very good VHF antenna system for a couple of reasons:
>
> First, it is very difficult to predict the direction that the house
> wiring
> will best receive from. It is quite likely that the antenna pattern
> will
> have all sorts of peaks and nulls, sort of as if you had a rotatable
> TV
> antenna that was pointing in several directions at once. This may
not
> pick
> up much of the TV signal you want to pick up or may have multiple
> responses,
> resulting in ghosts.
>
> Also, an electrical power line can be a very noisy place. All sorts
of
> electronic devices on the line, from power-line equipment itself to
> every
> motor or power supply plugged in near you may create noise that will
> interfere with the signal you want to receive.
>
> If you have no other antenna choice, that device may be useable, but
I
> don't
> think it will work as well as a good set of "rabbit ears" on top of
> your TV.
>
> Ed Hare, W1RFI
>
==========
>
> The disadvantage of the electrical wiring going in several different
> directions may actually be an advantage in regards to a SETI search
> since you would want the detections to be omnidirectional. If there
> are 100,000,000 homes which average 10 meters across then this would
> result in a collecting area of 10,000 x 10 meters = 100 km across.
> Since you would want to include large commercial establishments, the
> size would actually be larger than this.
>

>
>
> Bob Clark
>
>
> rgregoryclark@yahoo.com wrote in message
news:<1106126272.160248.294240@z14g2000cwz.googlegroups.com>...
> > I was interested to read this on the Seti League web site:
> >
> > ____
> > Parasitic SETI
> > Dear Dr. SETI:
> > As a Satellite dish owner and a strong interest in SETI, I was
> > wondering if anything is available to allow the home satellite dish
> > owner to 'search' when he is not watching TV. I do a bit of
programing
> > and would love to help make it so home dish owners could do this.
Is it
> > possible? What would it take? Does the dish have to follow a spot
or
> > can it sweep the sky from a fixed position? If this is possible it
> > could add a million listeners to the system.
> >
> > Bill T.
> >
> > The Doctor Responds:
> > Absolutely, Bill! Parasitic SETI with a home satellite TV dish is
not
> > only feasilble, it's widely practiced. A second feedhorn and preamp
> > assembly are mounted next to the C-band horn/LNB at the apex of the
> > dish (see Figure 2 of this article). This assembly feeds the rest
of a
> > SETI system (see our online Tech Manual). You can then sweep out
the
> > sky, as described here. And yes, a million participants would be
nice,
> > but our goal is a more modest 5000 stations.
> > ____
> > http://www.setileague.org/askdr/parasite.htm
> >
> > I believe they are referring to the 6 ft. backyard type antennas,
> > judging from the linked images on the page. But could the roof
mounted
> > DirectTV and Dish Network type antennas be used for SETI?
> > The mentioned extra equipment are an extra feedhorn and a
> > preamplifier. The feedhorn can made cheaply but the preamp seems
> > expensive. If these preamps were mass produced for this purpose
could
> > their per item cost be brought under $50?
> > I'm envisionig a government agency such as NSF, or a scientically

> > interested billionaire, paying satellite TV companies to attach
this
> > extra equipment to their satellite dishes. Say $100 million is
> > earmarked for the program. Then you would want the extra cost to be
> > under $100 for each dish for say 1,000,000 subscribers. Judging
from
> > the diagram in the online Tech Manual linked to on the page, the
other
> > equipment should be doable by the equipment that comes with the
> > satellite TV system. Computer processing would be done separately
at a
> > central location.
> > If you had a 1,000,000 of these .5 meter wide antennas it would
have
> > the detection sensitivy of a single antenna 500 meters wide.
> > Bob Clark

147. Re: And yet an even more radical proposal.

Newsgroup: rec.radio.amateur.space
Date: 2005-02-21 21:16:38 UTC
From: Joseph Lazio <jlazio@adams.patriot.net>
Message-ID: <ll3bvpd361.fsf@adams.patriot.net>
Source record: 2111
Cross-posted to: sci.astro.seti,sci.astro,rec.radio.amateur.space

>>>>> "RC" == Robert Clark <rgregoryclark@yahoo.com> writes:

RC> Another possible problem is that I'm not even sure the receivers
RC> that come with the satellite dishes can even detect frequencies
RC> other than the 12 Ghz the satellites broadcast at. In regard to
RC> the wavelengths that the .5 m antennas could usefully collect,
RC> I've seen references that a dipole antenna should be a quarter of
RC> the wavelength. Is this different for parabolic antennas?

The rule of thumb is that the dish should be more than about 6
wavelengths across, or diffraction starts to become really important.
Thus, for instance, the VLA (25 meter diameter), when operated at 74
MHz (4 meter wavelength), is right on the hairy edge.

--
Lt. Lazio, HTML police | e-mail: jlazio@patriot.net
No means no, stop rape. | http://patriot.net/%7Ejlazio/
sci.astro FAQ at http://sciastro.astronomy.net/sci.astro.html

148. Re: And yet an even more radical proposal.

Newsgroup: rec.radio.amateur.space
Date: 2005-02-21 22:08:16 UTC
From: Jan Panteltje <pNaonStpealmtje@yahoo.com>
Message-ID: <1109023752.a4c6ac00eee8e2e395f555b3d13ec322@teranews>
Source record: 2112
Cross-posted to: sci.astro.seti,sci.astro,rec.radio.amateur.space,sci.physics

On a sunny day (21 Feb 2005 12:24:20 -0800) it happened "Robert Clark"
<rgregoryclark@yahoo.com> wrote in
<1109017460.434188.272970@f14g2000cwb.googlegroups.com>:

>Another possible problem is that I'm not even sure the receivers that
>come with the satellite dishes can even detect frequencies other than
>the 12 Ghz the satellites broadcast at.
> In regard to the wavelengths that the .5 m antennas could usefully
>collect, I've seen references that a dipole antenna should be a quarter
>of the wavelength. Is this different for parabolic antennas?
> I'm thinking perhaps you could simply attach flat metal dipoles to the
>surface of the .5 meter antennas so they could collect megahertz
>frequencies. Then at a quarter wavelength you could collect down to 2
>meter wavelengths or 150 Mhz.
> While we're at it, the thought of using dipoles, like TV antennas,
>raises another possibility. You need receivers for these frequencies.
>Where could we get large numbers of receivers already existing at these
>frequencies? Inside TV's! Assuming we could solve the problem of
>tranmitting the data to a central site (ultra wideband, broadband over
>power-lines, amateur packet radio, etc.), we could have all new TV's
>come installed with a circuit that transmits received signals to the
>central site. The number of new TV's sold yearly worldwidde is 90
>million. This would result in markedly larger numbers of possible
>receivers even above the satellite TV approach.
> There might be privacy issues with this idea however.
>
>
> Bob Clark
>
>
>Robert Clark wrote:
>> A.) According to this article $1.4 billion dollars is earmarked to be
>> spent on the Square Kilometer array with completion expected by 2015:
>>
>> Radio Astronomy Will Get a Boost With the Square Kilometer Array.
>>
>http://www.universetoday.com/am/publish/radio_astronomy_boost_ska.html?1592004
>>
>> As I stated below the primary extra components to be added to the
>> DirecTV dishes to be used for radio astronomy are the feedhorn and
>the
>> preamp. The feedhorn is simply a metal pipe of little cost. The
>> SetiLeague site lists sellers of specially made preamps for SETI

>> search at $150. But these are handmade. From the low number of
>circuit
>> elements, I estimate that if mass produced at the millions of items
>> level the price could come down in the range of $10 each.
>> This site states the rate of growth of satellite TV subscribers is
>at
>> 4 million per year:
>>
>> Satellite TV Basics.
>> http://www.satellitetv-hq.com/hqguides/satellite-tv-basics.html
>>
>> This means the *receivers* for the SKA system if using these
>> satellite dishes could be installed in 1 year at an extra cost of $10
>> x 4,000,000 = $40 million dollars. Note that the feedhorn and the
>> preamp could be attached at manufacture would not cost more on
>> installation labor. The installation is already paid for by the
>> satellite TV subscribers. To pay for the extra cost for the added
>> equipment you could simply add $1 extra per month to the subscriber
>> rate. Then these 4 million, .5 meter wide dishes would have a total
>> collecting area of a disk 2000 x .5 m = 1000m = 1km wide, the total
>> collecting area expected for the SKA. Moreover this would have the
>> advantage that an additional square kilometer of collecting area
>would
>> automatically be added every year over several years going by the
>> present growth rate.
>> You could also attach the extra equipment to the 25 million
>satellite
>> systems already installed in perhaps 4 or 5 years. The number of
>> satellite TV subscribers worldwide was 60 million in 2003 and is
>> expected to grow to 100 million by 2008:
>>
>> Digital Satellite TV Platforms Continue to Gain Subscribers, and
>> Profits are on the Rise.
>> http://www.instat.com/press.asp?ID=1171&sku=IN0401236MB
>>
>> If this many .5 meter antennas were networked together, they would
>> have the collecting area of a single antenna 10,000 x .5 m = 5 km
>> wide.
>>
>> Note that the idea of using over 50 million separate, stationary
>> elements is one of the proposals being considered for the SKA
>> architecture:
>>
>> Aperture Array (AA)
>> http://www.skatelescope.org/pages/design_nl.htm
>>
>> This method of keeping the receiving antennas fixed while detection
>> directions are determined electronically is called the phased array
>> approach and has the advantage that many separate targets can be
>> observed simultaneously. It also has the advantage that interfering

>> local signals can be suppressed. However, the Aperture Array has
>> antennas close together in a predetermined configuration with the
>> positions precisely determined. How could this work for the randomly
>> positioned satellite dishes?
>> Methods of differential GPS and carrier phase synthesis now have the
>> capability of determining position to within millimeters. The method
>> compares the GPS signal between a precisely known site and an unknown
>> site to locate the unknown site to within centimeters. Then a
>> comparison is made in the actual phase of the signals received at the
>> two sites to locate the unknown site to within millimeters:
>>
>> CARRIER-PHASE TRACKING
>> "Carrier-phase tracking provides for a more accurate range resolution
>> due to the short wavelength (about 19 centimeters for L1 and 24
>> centimeters for L2) and the ability of a receiver to resolve the
>> carrier phase down to about 2 millimeters. This technique has primary
>> application to engineering, topographic, and geodetic surveying and
>> may be employed with either static or kinematic surveys. There are
>> several techniques that use the carrier phase to determine a
>station's
>> position. These include static, rapid-static, kinematic, stop-and-go
>> kinematic, pseudokinematic, and on-the-fly (OTF) kinematic/Table 8-4
>> lists these techniques and their required components, applications,
>> and accuracies."
>> http://cartome.org/FM3-34/Chapter8.htm
>>
>> This should be sufficient for keeping the signals for the millions
>of
>> antennas in phase up to perhaps 3 cm wavelength, 10 Ghz frequency.
>> Timing synchronization can be obtained by synchronizing from the
>> common signal received by the dishes from the satellite.
>> The Argus telescope at Ohio State University (this is different from
>> Project Argus operated by The Seti League) may provide a model for
>how
>> sensitive such a system can be operating from noisy populated areas:
>>
>> Newsgroups: sci.astro.seti
>> From: Bob Dixon <dixo...@osu.edu>
>> Date: Wed, 19 May 2004 12:49:02 -0400
>> Subject: The Argus Telescope
>>
>http://groups-beta.google.com/group/sci.astro.seti/browse_frm/thread/54ddf1f29f629f20/
>>
>> Argus Expands the Search For Life.
>> By Daniel Sorid
>> posted: 03:30 pm ET
>> 09 June 2000
>> http://www.space.com/searchforlife/seti_argus_000609.html
>>
>> Note though that the continent wide satellite dish system will have

>> an advantage over Argus in dismissing unwanted signals in that such
>> signals would only be detected by a local group of antennas not the
>> continent wide system.
>>
>> In mentioning an estimated price for this system, I emphasized the
>> estimate was for the *receiving* part of the system. But of course
>for
>> such a system of separate receivers, it is just as important to
>> combine and process the signals.
>> In the thread for DirecTV being used for SETI, someone mentioned you
>> might need to transfer 1 Gbps from each antenna for detections at 12
>> Ghz. I seem to recall that analog signals can be tranferred in
>greater
>> density than digital signals. Perhaps the signal received by each
>> antenna can be transmitted in analog form with a stamp indicating its
>> location and time of origin.
>> For examples of the data density required we could look at some
>> examples of systems of separate antennas that have been used to give
>> combined signals in *real time*:
>>
>> Astronomers Demonstrate a Global Internet Telescope.
>> Date Released: Friday, October 08, 2004.
>> http://www.spaceref.com/news/viewpr.html?pid=15251
>>
>> This produced data of 32 Mbits/second for each telescope for
>> observations at 1.6 Ghz. So at 16 Ghz perhaps 320 Mbps might be
>> expected for each antenna. The data was sent over a high-speed
>> internet network available to universities that operates at gigabits
>> per second. Within a few years, the data transfer rate is expected to
>> reach tens of gigabits per second.
>>
>> And:
>>
>> Prototype SETI Antenna Array Will Help Radio Astronomers Too.
>> Date Released: Wednesday, June 07, 2000.
>> http://www.spaceref.com/news/viewpr.html?pid=1992
>>
>> This is of the Argus telescope at Ohio State University. The 64
>> antennas here detect signals from 400 to 2000 Mhz. The antennas
>> together produce 2.56 gigabytes per second, or 20.48 gigabits per
>> second. So each telescope produces 320 Mbps. This article states that
>> no physical connection could economically carry that much data over
>> distance however this was written in 2000. Ultra wideband technology
>> (mentioned below) now has that capability.
>>
>> For processing the data for the proposed SKA system, I expect the
>> distributed computing system used by Set@Home to be used, wherein
>> millions of computers take part in the calculations. As for how the
>> data can be sent by the individual antennas, there are a few possible
>> ways the signals could be combined.

>>
>> 1.)DirecTV offers a two-way broadband satellite internet service
>> called DirecWay. This allows signals to be sent from the home
>antennas
>> back up to the transmitting satellite. However, this system currently
>> has only a 100,000 subscribers in place. I want to use the millions
>of
>> subscribers using the satellite TV systems. I think a minor low-cost
>> modification of the current TV antennas would also allow them to
>> transmit to the satellites used for broadband internet service. (I
>> don't think the satellites used for TV service can be used to receive
>> signals.)
>>
>> 2.)Another possibility for transferring the data from each antenna
>> might be to use military satellites currently used for surveillance
>on
>> radio transmissions, perhaps using satellites that were
>decommissioned
>> and are no longer used for sensitive military tasks.
>>
>> 3.)Possibly the techniques used with amateur packet radio could be
>> used. Here radio links are used to setup data networks analogously to
>> how the internet sets up data transfer networks using the TCP/IP
>> protocols:
>>
>> N6GN's Microwave Link Page
>> http://www.sonic.net/~n6gn/uwavelink/uwv.html
>>
>> INEXPENSIVE MULTI-MEGABAUD MICROWAVE DATA LINK
>> http://www.sonic.net/~n6gn/hr89/uwvarticle.html
>>
>> 4.)Ultra wideband (UWB) promises gigabit data transfers over both
>> cable and wireless connections and should be available this year
>> (2005):
>>
>> New chipset promises gigabit broadband on cable and wireless.
>> Rupert Goodwins
>> ZDNet UK
>> May 11, 2004, 15:20 GMT
>> http://news.zdnet.co.uk/communications/0,39020336,39154271,00.htm
>>
>> Ultrawideband in 2005, but only in America
>> Rupert Goodwins
>> ZDNet UK
>> February 19, 2004, 09:45 GMT
>>
>http://news.zdnet.co.uk/communications/wireless/0,39020348,39146644,00.htm
>>
>> Ultrawideband: Wireless Whoopee.
>> 08:34 AM Oct. 09, 2004 PT

>> "SAN FRANCISCO -- Think of it as Wi-Fi on steroids. On its way to
>U.S.
>> living rooms and maybe even automobiles is a new type of high-speed
>> wireless connection that promises downloaded data rates of up to 1
>> gigabit per second -- roughly 18.5 times the speed of Wi-Fi -- to
>> personal computers and other devices.
>> "This ultrawideband technology, which could become available in the
>> next two years, also allows the devices to send data upstream to a
>> network at 480 megabits per second."
>>
>http://www.wired.com/news/technology/0,1282,65297,00.html?tw=wn_tophead_3
>>
>> 5.)Some public utilities now collect their meter readings from radio
>> transmitters attached to their meters. The data is collected by
>> receiver on utility poles and then transmitted to a central site.
>This
>> method could be adapted to work for collecting the data from the
>> separate antennas.
>>
>> 6.) The above methods would require that the data transmissions be on
>> specified frequencies that will not be used for detections. However,
>> another method might not have this limitation:
>>
>> Broadband Over Power Lines?
>> 01:15 PM Feb. 09, 2003 PT
>> "ST. LOUIS -- Coming to a home or office near you could be an
>electric
>> Internet: high-speed Web access via ubiquitous power lines, of all
>> things, making every electrical outlet an always-on Web connection."
>> http://www.wired.com/news/technology/0,1282,57605,00.html
>>
>> This is a new technique already being tested in small markets to
>> provide interent service over power lines. The speed of transmission
>> can be ramped up to 1 gigabits per second using ulta wideband
>> technology.
>>
>> B.)This last leads me to another proposal for large scale separated
>> antennas for radio astronomy: using the electrical wiring in
>> households as radio antennas. Here's a post to
>> rec.radio.amateur.antenna discussing this:
>>
>>
>>==========
>> From: Ed Hare, W1RFI (w1rfi@arrl.net)
>> Subject: Re: ISO info about using house wiring as a TV antenna
>> Newsgroups: rec.radio.amateur.antenna
>> Date: 2000-12-29 15:33:06 PST
>>
>> Richard Friday <tgirwf@bigfoot.com> wrote in message
>> news:92j4h7$2b2$1@bob.news.rcn.net...

>>
>> > I know this post might be off-topic but could find no other
>newsgroup that
>> > had "antenna" in its name. I'd be most appreciative if someone
>could point
>> > to a more suitable discussion or other source of information.
>> > I've seen advertised a device that claims to allow you to use the
>> > electrical wiring of your house as a tv antenna. You plug this
>device
>> > into an outlet, and then use connections it provides as your tv
>antenna.
>> > I'm trying to find out if this actually works but have not been
>able to
>> > find any reviews.
>>
>> This device will receive some signals. However, house electrical
>> wiring is
>> not a very good VHF antenna system for a couple of reasons:
>>
>> First, it is very difficult to predict the direction that the house
>> wiring
>> will best receive from. It is quite likely that the antenna pattern
>> will
>> have all sorts of peaks and nulls, sort of as if you had a rotatable
>> TV
>> antenna that was pointing in several directions at once. This may
>not
>> pick
>> up much of the TV signal you want to pick up or may have multiple
>> responses,
>> resulting in ghosts.
>>
>> Also, an electrical power line can be a very noisy place. All sorts
>of
>> electronic devices on the line, from power-line equipment itself to
>> every
>> motor or power supply plugged in near you may create noise that will
>> interfere with the signal you want to receive.
>>
>> If you have no other antenna choice, that device may be useable, but
>I
>> don't
>> think it will work as well as a good set of "rabbit ears" on top of
>> your TV.
>>
>> Ed Hare, W1RFI
>>
>==
>>
>> The disadvantage of the electrical wiring going in several different

>> directions may actually be an advantage in regards to a SETI search
>> since you would want the detections to be omnidirectional. If there
>> are 100,000,000 homes which average 10 meters across then this would
>> result in a collecting area of 10,000 x 10 meters = 100 km across.
>> Since you would want to include large commercial establishments, the
>> size would actually be larger than this.
>>
>>
>>
>> Bob Clark
>>
>>
>> rgregoryclark@yahoo.com wrote in message
>news:<1106126272.160248.294240@z14g2000cwz.googlegroups.com>...
>> > I was interested to read this on the Seti League web site:
>> >
>> > ____
>> > Parasitic SETI
>> > Dear Dr. SETI:
>> > As a Satellite dish owner and a strong interest in SETI, I was
>> > wondering if anything is available to allow the home satellite dish
>> > owner to 'search' when he is not watching TV. I do a bit of
>programing
>> > and would love to help make it so home dish owners could do this.
>Is it
>> > possible? What would it take? Does the dish have to follow a spot
>or
>> > can it sweep the sky from a fixed position? If this is possible it
>> > could add a million listeners to the system.
>> >
>> > Bill T.
>> >
>> > The Doctor Responds:
>> > Absolutely, Bill! Parasitic SETI with a home satellite TV dish is
>not
>> > only feasilble, it's widely practiced. A second feedhorn and preamp
>> > assembly are mounted next to the C-band horn/LNB at the apex of the
>> > dish (see Figure 2 of this article). This assembly feeds the rest
>of a
>> > SETI system (see our online Tech Manual). You can then sweep out
>the
>> > sky, as described here. And yes, a million participants would be
>nice,
>> > but our goal is a more modest 5000 stations.
>> > ____
>> > http://www.setileague.org/askdr/parasite.htm
>> >
>> > I believe they are referring to the 6 ft. backyard type antennas,
>> > judging from the linked images on the page. But could the roof
>mounted

>> > DirectTV and Dish Network type antennas be used for SETI?
>> > The mentioned extra equipment are an extra feedhorn and a
>> > preamplifier. The feedhorn can made cheaply but the preamp seems
>> > expensive. If these preamps were mass produced for this purpose
>could
>> > their per item cost be brought under $50?
>> > I'm envisionig a government agency such as NSF, or a scientically
>> > interested billionaire, paying satellite TV companies to attach
>this
>> > extra equipment to their satellite dishes. Say $100 million is
>> > earmarked for the program. Then you would want the extra cost to be
>> > under $100 for each dish for say 1,000,000 subscribers. Judging
>from
>> > the diagram in the online Tech Manual linked to on the page, the
>other
>> > equipment should be doable by the equipment that comes with the
>> > satellite TV system. Computer processing would be done separately
>at a
>> > central location.
>> > If you had a 1,000,000 of these .5 meter wide antennas it would
>have
>> > the detection sensitivy of a single antenna 500 meters wide.
>> > Bob Clark
>
I am just a humkble electronics person with several years experience with
sat dishes.. and software (I write).
2 things bother me about the proposal (topic)
1)
The smaller the dish, the worse the signal to noise (lower signal level),
and you mostly will be in the noise.
2)
polarization, sat dish LNBs come hor or vert polarized, and perhaps circular.
What will it be.
If you only use the dish and your own preammp what will it be made of?
10 Ghz = 3 cm wavelength.
Remember the dishes are used to receive from only 40000km or a little more
away, and then get 'acceptable' signal to noise.
The sats transmits several watts of power.
For astronomy you will likely want to be a few orders of magnitude more
sensitive.
Liquid cooled parametric preamps for the amateur?
What am I missing here?

149. Re: And yet an even more radical proposal.

Newsgroup: rec.radio.amateur.space
Date: 2005-02-21 23:15:17 UTC
From: Schweinkolben <nospam@nospam.com>
Message-ID: <37v8brF5iofaaU1@individual.net>
Source record: 2113
Cross-posted to: sci.astro.seti,sci.astro,rec.radio.amateur.space,sci.physics

"Robert Clark" <rgregoryclark@yahoo.com> wrote in message
news:1109017460.434188.272970@f14g2000cwb.googlegroups.com...
> Another possible problem is that I'm not even sure the receivers that
> come with the satellite dishes can even detect frequencies other than
> the 12 Ghz the satellites broadcast at.

True, 12 gig only.

> In regard to the wavelengths that the .5 m antennas could usefully
> collect, I've seen references that a dipole antenna should be a quarter
> of the wavelength. Is this different for parabolic antennas?

Yes, it is different.

> I'm thinking perhaps you could simply attach flat metal dipoles to the
> surface of the .5 meter antennas so they could collect megahertz
> frequencies. Then at a quarter wavelength you could collect down to 2
> meter wavelengths or 150 Mhz.

nope, dish too small.
Dish needs to be 10 wave lengths or bigger.
@150 that is too big
Flat dipoles on surface are basicly shorted out

> While we're at it, the thought of using dipoles, like TV antennas,
> raises another possibility. You need receivers for these frequencies.
> Where could we get large numbers of receivers already existing at these
> frequencies? Inside TV's!

Noise figure is no good.

>Assuming we could solve the problem of
> tranmitting the data to a central site (ultra wideband, broadband over
> power-lines, amateur packet radio, etc.),

None of those have enough bandwidth/range to work.

> we could have all new TV's
> come installed with a circuit that transmits received signals to the
> central site. The number of new TV's sold yearly worldwidde is 90
> million. This would result in markedly larger numbers of possible
> receivers even above the satellite TV approach.

TVs create considerable RF noise and will cover the signals you want to
recieve.

> > > If you had a 1,000,000 of these .5 meter wide antennas it would
> have
> > > the detection sensitivy of a single antenna 500 meters wide.
> > > Bob Clark

Not true at all.
complete fiction,
how do you handle the pointing errors of 1,000,000 dishes?
You have to phase lock all the received signals to combine them, a
nd 0.5 meter dish works poorly at 12 GHz, and below.

150. Strings and the cosmos...

Newsgroup: rec.radio.amateur.space
Date: 2005-02-23 15:49:02 UTC
From: artbellfan <artbellfan8@yahoo.com>
Message-ID: <1109173742.178592.261330@g14g2000cwa.googlegroups.com>
Source record: 2114

Strings and the Cosmos....

http://www.shadowpeoplebooks.com

The entire concept of "Strings" fascinates me. The more I learn about this theory the more curious I become. If in fact this radical theory proves to be correct, the 'big bang' theory becomes an event that is a common occurrence. If this is true what implications does it have for man and our sense of reality? Perhaps the great distances of the cosmos are but micro measurements in a colossal system of some sort. Time when measured in human terms may be an insignificant measure when compared to whatever or whoever this system really is. Perhaps we were never meant to find answers to questions that are beyond the scope of our understanding. Maybe life and in turn intelligent life is simply a parasite that clings to a system ever changing.

Great minds of the past have given us wisdom to reach today's levels of what we refer to as advanced technology. Today the ones that will push the envelope still farther dabble with concepts that defy explanation. Science fiction writers have relied upon imagination to create situations that at the time of their writing seemed impossible. Later we often utilize many of these ideas in everyday life. Tomorrow will bring with it answers to many questions but more importantly it will bring more questions that need answers!

Currently I am writing a new book tentatively titled "Parallel Universes-Man's First Steps Beyond!" Researching the topic of parallel universes has already stretched my imagination and I would suspect that this story will give the reader some thought provoking ideas of what man might expect when the technology is perfected that allows travel between the layers of parallel universes. Many scientists believe such a layer exists and travel between them possible.

I invite you to share with me any ideas you may have as to 'parallel universes' and the 'string theory' and please do not be shy. It has been said, 'whatever can be will be' so any ideas you may have are equal candidates for discussion. Please take time to visit my website and check out my writings.

http://www.shadowpeoplebooks.com

Also you may be interested in my two groups at Yahoo. One deals with Dream Tranversion and the other deals with Shadow People. Join them if you like and add your comments to the discussion.

Dream Tranversion

http://groups.yahoo.com/group/dreamtranversion/

Shadow People

http://groups.yahoo.com/group/shadowpeoplebooks/

I hope to hear back from you!

151. echolink iss live feed 1647utc monday 28th feb 2005

Newsgroup: rec.radio.amateur.space
Date: 2005-02-26 07:55:11 UTC
From: g3zhi@hotmail.com
Message-ID: <42202ad3.2462934@news.btinternet.com>
Source record: 2115

echolink iss live feed 1647utc monday 28th feb 2005

A live feed of the ISS contact with a school in Bentley CA will be sent live into the AMSAT conference room, Echo Link node 101377 by Dieter, KX4Y. The contact between the ISS and school starts at 16:47 UTC and lasts for about 15 minutes +/-. During this contact, we appreciate everyone's patience and understanding. We must mute everyone except Dieter, KX4Y to avoid inadvertent, interfering transmissions into the conference room. Thanks for your understanding and cooperation.

American hams in the footprint can listen on 145.800 FM to the 'live' downlink audio

73 Ian G3ZHI

http://www.qsl.net/g3zhi - many ham radio links

http://www.ukirlp.co.uk

G4NJI IRLP 5200 Echolink 135909
Rotherham simplex 145.2875mhz

GB3XN IRLP 5708 Echolink 153126
Langold 430.925 Mhz

Mobile 0783 338 0578

152. Setting Time Zone in Instant Track ??

Newsgroup: rec.radio.amateur.space
Date: 2005-02-27 01:53:49 UTC
From: James <jnipperxxx@nospamfdn.com>
Message-ID: <LPWdnT7fopuztbzfRVn-gQ@comcast.com>
Source record: 2116

I have not done this is several years, and have now forgotten how to do it.

I am running Windows XP, and I have Instant Track working on this OS.

I need to set the time zone for EST. I know that the command is

set tz=est5edt

but for the life of me I cannot remember WHERE or HOW to do this.....

Can anyone help me please ??

73 de Jim K4PYT

153. Re: Setting Time Zone in Instant Track ??

Newsgroup: rec.radio.amateur.space
Date: 2005-02-27 02:07:26 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <yX9Ud.828$wy3.161@newsread3.news.atl.earthlink.net>
Source record: 2117

"James" <jnipperxxx@nospamfdn.com> wrote in message
news:LPWdnT7fopuztbzfRVn-gQ@comcast.com...
>
>
> I have not done this is several years, and have now forgotten how to do
it.
>
> I am running Windows XP, and I have Instant Track working on this OS.
>
>
>
>
> I need to set the time zone for EST. I know that the command is
>
> set tz=est5edt
>
> but for the life of me I cannot remember WHERE or HOW to do
this.........
>
> Can anyone help me please ??
>
>
> 73 de Jim K4PYT
>

I don't know about XP but in 98 it would go in the autoexec.bat file.

YOu open the file , change it , save it, then restart windows.

154. Re: Setting Time Zone in Instant Track ??

Newsgroup: rec.radio.amateur.space
Date: 2005-02-27 02:09:36 UTC
From: James <jnipperxxx@nospamfdn.com>
Message-ID: <MLydna4PBfp8trzfRVn-og@comcast.com>
Source record: 2118

Thank you very much !! That sounds familiar to me, but I would not have thought of it.... I will try it.

Thanks again !!

73 de JIm K4PYT

155. Re: Setting Time Zone in Instant Track ??

Newsgroup: rec.radio.amateur.space
Date: 2005-02-27 04:29:09 UTC
From: Dennis Kaylor <k4oxg@tampabay.rr.com>
Message-ID: <p0cUd.124006$JF2.22415@tornado.tampabay.rr.com>
Source record: 2119

if you would rather have a FREE windows based satellite tracking software
check out www.satscape.co.uk
its a very good program

James wrote:
> Thank you very much !! That sounds familiar to me, but I would not have
> thought of it.... I will try it.
>
>
> Thanks again !!
>
> 73 de JIm K4PYT
>
>

156. Setting Time Zone in Instant Track / Help again !

Newsgroup: rec.radio.amateur.space
Date: 2005-02-28 01:26:34 UTC
From: James <jnipperxxx@nospamfdn.com>
Message-ID: <h9GdnSmzkJXR7r_fRVn-qQ@comcast.com>
Source record: 2120

I posted this question and got a prompt reply, and yet I cannot get it to work.

I find the autoexec.bat file on my pc. I right click the file, and select Edit.

A window opens in Notepad. There are some minor entries there, so I first hit the return key, and then I type the exact words:

set tz=est5edt

I then select Edit (in the notepad window), and then Save.

I reboot. But, the time zone change does not take effect in Instant Track.

I have tried this 4 times, but no luck. Somehow, I am making a mistake in the edit process I am sure.

Can anyone tell me where I am making a mistake please ? (I am using Windows XP)

73 de Jim K4PYT

157. Sign up for a great free science e-newsletter!

Newsgroup: rec.radio.amateur.space
Date: 2005-02-28 04:07:03 UTC
From: neutrino750@yahoo.com
Message-ID: <1109563623.301683.248070@g14g2000cwa.googlegroups.com>
Source record: 2121
Cross-posted to: rec.radio.amateur.space,rec.radio.scanner,rec.radio.shortwave,rec.scouting.guide+girl,rec.scouting.issues

We'd like to invite you to join our free
WORLD SCIENCE e-newsletter, which
contains some of the world's most exciting
science news and photos long before they're
in the papers and magazines. A sample
newsletter is below.

To join, just send an email with "subscribe"
in the subject line to:
neutrino750 @ yahoo.com (remove the spaces).

The newsletter, sent out about every 3-10
days, contains short summaries of our new
stories, with links to web pages containing
the full stories. It's free: no pop-ups, passwords,
spam, or gimmicks -- that's our pledge! The full
story pages do contain small side ads (non
pop-up), which are what supports our news-
letter. YOU pay nothing ever. You can cancel
anytime simply by replying to a newsletter
email and typing "unsubscribe" in the subject
line.

Below is a sample newsletter. It doesn't
contain the full story links because we're not
allowed to provide them here, but the real
newsletter will contain working links.

****
LAST WEEK'S WORLD SCIENCE EMAIL
NEWSLETTER

* Possible dinosaur-bird missing link found:
It's not the first bird-like dinosaur ever found --
but it is the closest yet found to the actual
dinosaur ancestor of birds, researchers say.

Click here for full story (link will work in the real newsletter)

* Science in Images - A more life-friendly Mars:
Most Mars photos show a rocky, dry-looking land-
scape. This is another view: an area of the planet
that researchers think might have once been
habitable. They plan to explore further.

Click here for full story (link will work in the real newsletter)

* Another record: biggest blast ever in our
galaxy:
The most powerful explosion in our galaxy ever
recorded occurred recently when an exotic star's
magnetic field snapped, astronomers say.

Click here for full story (link will work in the real newsletter)

* New robots walk nearly like humans:
An older robot does it too, but it used 10 times as
much energy as humans do, researchers say; that is
changing.

Click here for full story (link will work in the real newsletter)

* Brain doesn't have universal language rules,
researchers claim:
Some researchers argue that language is more like
a creation of itself than a creation of our brains.

Click here for full story (link will work in the real newsletter)

158. Re: Setting Time Zone in Instant Track / Help again !

Newsgroup: rec.radio.amateur.space
Date: 2005-02-28 06:24:17 UTC
From: "George, KA3HSW" <not@vailable.to.spammers>
Message-ID: <lOyUd.1928$wy3.750@newsread3.news.atl.earthlink.net>
Source record: 2122

It did not work because XP does not use the autoexec.bat file at startup....
you need to right-click your "My Computer" icon, choose the Advanced tab,
then click the Environment Variables button. In the lower half of the
window, below the System Variables box, click the New button, and then type
in "set" (no quotes) for the variable name, and "tz=EST5EDT" (again, no
quotes) for the variable value, and click OK to save.

73 de KA3HSW

"James" <jnipperxxx@nospamfdn.com> wrote in message
news:h9GdnSmzkJXR7r_fRVn-qQ@comcast.com...
>
> I posted this question and got a prompt reply, and yet I cannot get it to
> work.
>
> I find the autoexec.bat file on my pc. I right click the file, and
> select Edit.
>
> A window opens in Notepad. There are some minor entries there, so I first
> hit the return key, and then I type the exact words:
>
> set tz=est5edt
>
> I then select Edit (in the notepad window), and then Save.
>
> I reboot. But, the time zone change does not take effect in Instant
> Track.
>
> I have tried this 4 times, but no luck. Somehow, I am making a mistake
> in
> the edit process I am sure.
>
> Can anyone tell me where I am making a mistake please ? (I am using
> Windows XP)
>
>
> 73 de Jim K4PYT
>
>
>

159. Re: Setting Time Zone in Instant Track ??

Newsgroup: rec.radio.amateur.space
Date: 2005-02-28 16:40:37 UTC
From: "Vince Fiscus, KB7ADL" <vlfiscus.xyz@mcn.net>
Message-ID: <9QHUd.7668$MY6.5040@newsread1.news.pas.earthlink.net>
Source record: 2123

Dennis Kaylor <k4oxg@tampabay.rr.com> wrote in news:p0cUd.124006$JF2.22415
@tornado.tampabay.rr.com:

> if you would rather have a FREE windows based satellite tracking software
> check out www.satscape.co.uk
> its a very good program
>

But not as good as InstantTrack.

KB7ADL

160. Re: Setting Time Zone in Instant Track / Help again !

Newsgroup: rec.radio.amateur.space
Date: 2005-03-01 01:22:04 UTC
From: James <jnipperxxx@nospamfdn.com>
Message-ID: <m5-dnaBx4N5dXr7fRVn-3w@comcast.com>
Source record: 2124

George, thank you so much for the reply. I have followed your steps precisely, and rebooted, but the time zone in IT does not change to my local time zone as I have set the variable.

I have gone back into Variables Box and rechecked the words

set

(and)

tz=est5edt

and they are in the right places as instructed. I also tried it in upper case and lower case, to see if that would make a difference. Each time I have tried the setting I have rebooted my pc, but IT keeps the default PST time zone.

What do you think I may be doing wrong ?

To the other poster offering another tracking program, I thank you too, but I have used IT for a number of years and it is perfect for me.

73 de Jim K4PYT

161. recording of the iss school contact monday 28th feb 2005

Newsgroup: rec.radio.amateur.space
Date: 2005-03-01 07:29:20 UTC
From: g3zhi@hotmail.com
Message-ID: <42241994.2218386@news.btinternet.com>
Source record: 2125

recording of the iss school contact monday 28th feb 2005

Hello, All.

This post is on Russian_VoIP and EchoLink Main forums. The ISS feed
audio WA file you can download from the web address
http://www.echolink.ru/downloads/WH6PM_ISSContact_20050228_1920.wav
The File is over 10MB

--
Anthony Laukhin (RV3DHC)
EchoLink & IRLP , Russia
http://www.EchoLink.Ru

73 Ian G3ZHI

http://www.qsl.net/g3zhi - many ham radio links

http://www.ukirlp.co.uk

G4NJI IRLP 5200 Echolink 135909
Rotherham simplex 145.2875mhz

GB3XN IRLP 5708 Echolink 153126
Langold 430.925 Mhz

Mobile 0783 338 0578

162. Re: Setting Time Zone in Instant Track / Help again !

Newsgroup: rec.radio.amateur.space
Date: 2005-03-01 10:43:17 UTC
From: Les Thompson <Les@holywell.demon.co.uk>
Message-ID: <drPRJ6AFdEJCFwbb@holywell.demon.co.uk>
Source record: 2126

In article <m5-dnaBx4N5dXr7fRVn-3w@comcast.com>, James
<jnipperxxx@nospamfdn.com> writes
>
>
>George, thank you so much for the reply. I have followed your steps
>precisely, and rebooted, but the time zone in IT does not change to my local
>time zone as I have set the variable.
>
>I have gone back into Variables Box and rechecked the words
>
>
>set
>
>
>(and)
>
>
>tz=est5edt
>
>
>and they are in the right places as instructed. I also tried it in upper
>case and lower case, to see if that would make a difference. Each time I
>have tried the setting I have rebooted my pc, but IT keeps the default
>PST time zone.
>
>What do you think I may be doing wrong ?
>
>To the other poster offering another tracking program, I thank you too, but
>I have used IT for a number of years and it is perfect for me.
>
>73 de Jim K4PYT
>
I had to dig out my old copy of IT to try this and found that the file
you need to put the SET command in is in the windows directory:
C:\Windows\system32\autoexec.nt
Open autoexec.nt with notepad to edit, works fine for me in the uk with
a setting of GMT0. I haven't used IT for years my copy is dated 1989
but still works well in XP.

HTH
--
Les G8ARF / G3VYZ

163. Re: Setting Time Zone in Instant Track / Help again !

Newsgroup: rec.radio.amateur.space
Date: 2005-03-03 01:16:07 UTC
From: "George, KA3HSW" <not@vailable.to.spammers>
Message-ID: <rztVd.113$KD6.61@newsread2.news.atl.earthlink.net>
Source record: 2127

Strange..... well, a guaranteed way to get IT into the right time zone is to go into the IT.INI file and make sure that the PST line is commented out, and (for you) the EST line is uncommented. I can't recall whether this method overrides the environment variable or vice versa, but I just checked on my system and I have both the environment variable and the .INI file set correctly for my TZ (CST) and IT works fine.

George, KA3HSW

"James" <jnipperxxx@nospamfdn.com> wrote in message news:m5-dnaBx4N5dXr7fRVn-3w@comcast.com...
>
>
> George, thank you so much for the reply. I have followed your steps
> precisely, and rebooted, but the time zone in IT does not change to my
> local
> time zone as I have set the variable.
>
> I have gone back into Variables Box and rechecked the words
>
>
> set
>
>
> (and)
>
>
> tz=est5edt
>
>
> and they are in the right places as instructed. I also tried it in upper
> case and lower case, to see if that would make a difference. Each time
> I
> have tried the setting I have rebooted my pc, but IT keeps the default
> PST time zone.
>
> What do you think I may be doing wrong ?
>
> To the other poster offering another tracking program, I thank you too,
> but
> I have used IT for a number of years and it is perfect for me.
>
> 73 de Jim K4PYT
>
>

>

164. Re: Setting Time Zone in Instant Track / Help again !

Newsgroup: rec.radio.amateur.space
Date: 2005-03-03 04:03:45 UTC
From: James <jnipperxxx@nospamfdn.com>
Message-ID: <g7ednQ_pQLA_EbvfRVn-1Q@comcast.com>
Source record: 2128

George, please forgive me, but I am not well-versed in the innards of the Windows OS. I did find my IT.INI file, and it reads in part as follows:

```
# Parameters affecting time...

# Uncomment one of these, or make your own:
# timezone = PST8PDT
# timezone = PST8
# timezone = MST7MDT
# timezone = MST7
# timezone = CST6CDT
# timezone = CST6
# timezone = EST5EDT
# timezone = EST5
# timezone = UTC0
# timezone = HST-8
# timezone = KST-8KDT
```

I don't know how to "uncomment" a line. I do want my time zone to be est5edt.

Can you tell me exactly what to do ?? Should I delete all of the 11 entries shown above, except for the time line that I need ??

I am sure that I can do this if I have the exact procedure to follow.

I do appreciate everyone's help.

73 de Jim K4PYT

165. Re: Setting Time Zone in Instant Track / Help again !

Newsgroup: rec.radio.amateur.space
Date: 2005-03-03 14:44:33 UTC
From: mikea@mikea.ath.cx
Message-ID: <d077sgqhr4@puck.litech.org>
Source record: 2129

James <jnipperxxx@nospamfdn.com> wrote:

> George, please forgive me, but I am not well-versed in the innards of the
> Windows OS. I did find my IT.INI file, and it reads in part as follows:

> # Parameters affecting time...

> # Uncomment one of these, or make your own:
> # timezone = PST8PDT
> # timezone = PST8
> # timezone = MST7MDT
> # timezone = MST7
> # timezone = CST6CDT
> # timezone = CST6
> # timezone = EST5EDT
> # timezone = EST5
> # timezone = UTC0
> # timezone = HST-8
> # timezone = KST-8KDT

> I don't know how to "uncomment" a line. I do want my time zone to be
> est5edt.

> Can you tell me exactly what to do ?? Should I delete all of the 11
> entries shown above, except for the time line that I need ??

> I am sure that I can do this if I have the exact procedure to follow.

> I do appreciate everyone's help.

To uncomment the line, remove the pound (or sharp) sign and leading
blank(s) from the front. If you want to wind up with, say, PST for
Standard Time and PDT for Daylight Saving Time, you'd uncomment this
line:

timezone = PST8PDT

to get this:

timezone = PST8PDT

and that's all there is to it. Then you reboot, and you should have
what you want.

I'd leave the rest of them in place, since you may move at some point
-- unless, you, like me, can't afford to move the books.

--
Mike Andrews W5EGO 5WPM

mikea@mikea.ath.cx Extra
Tired old sysadmin working on his code speed

166. Re: Could DirecTV satellite dishes be used for the Square Kilometer Array - and a more radical proposal[Re: Can DirectTV-type satellite dishes be used for SETI?]

Newsgroup: rec.radio.amateur.space
Date: 2005-03-04 03:56:07 UTC
From: rgregoryclark@yahoo.com
Message-ID: <1109908567.005197.114150@z14g2000cwz.googlegroups.com>
Source record: 2130
Cross-posted to: sci.astro.seti,sci.astro,rec.radio.amateur.space,sci.physics

In regard to the computations that might be required there is also
this:

Who's been using your PC?
"From the user's point of view, surfing the web is simple - you type
a URL (uniform resource locator) into a web browser and, most of the
time, the correct web page appears on the screen. Behind the scenes
however a sophisticated process regulated by layers of complex
protocols is responsible for finding, checking and delivering the page
that has been requested. In the latest issue of Nature, Barabasi et al.
describe a way of 'hijacking' this communication infrastructure and
creating a distributed network made up of unwitting web servers."
http://www.nature.com/nature/fow/010830.html

Parasitic computing.
Albert-Laszlo Barabasi*, Vincent W. Freeh², Hawoong Jeong*
& Jay B. Brockman²
* Department of Physics; and ² Department of Computer Science and
Engineering,
University of Notre Dame, Notre Dame, Indiana 46556, USA
"Reliable communication on the Internet is guaranteed by a
standard set of protocols, used by all computers1. Here we show
that these protocols can be exploited to compute with the communication
infrastructure, transforming the Internet into a distributed
computer in which servers unwittingly perform
computation on behalf of a remote node."
NATURE | VOL 412 | 30 AUGUST 2001 | p. 894-897
http://www.nd.edu/~parasite/nature.pdf

Bob Clark

167. Spirit in the Sky Funerals

Newsgroup: rec.radio.amateur.space
Date: 2005-03-05 20:21:34 UTC
From: spiritintheskyfunerals@webtv.net
Message-ID: <19327-422A14CE-261@storefull-3231.bay.webtv.net>
Source record: 2131

http://community-2.webtv.net/earthling109/SpiritintheSky/

168. INTERNATIONAL SPACE STATION LIVE ON ECHOLINK MARCH 8th TUES 1410GMT

Newsgroup: rec.radio.amateur.space
Date: 2005-03-06 14:37:23 UTC
From: g3zhi@hotmail.com
Message-ID: <422c157b.1025963@news.btinternet.com>
Source record: 2132

INTERNATIONAL SPACE STATION LIVE ON ECHOLINK MARCH 8th TUES 1410GMT

The next International Space Station's Expedition 10 ARISS school contact will be with students at Rains High School in Emory, Texas on Tuesday, 8 March 2005. The event is scheduled to begin at approximately 14:10 GMT.

This contact will be a telebridge between stations NA1SS and WH6PN in Honolulu, Hawai'i, so it should be audible to anyone in the areas of the Pacific near the islands listening in on the 145.80 MHz downlink. The participants will conduct the conversation in English.

"Rains High School, a county school located in one of the smallest counties in Texas, is comprised of mostly low-income students who often do not get the opportunity to participate in enriching programs. The opportunity to talk with the astronauts on the International Space Station will expose our students to a world that exists beyond the boundaries of Rains County. The questions asked of the astronauts and the ideas generated by the answers will be used as jumping off points for further discussion and research."

Audio should be available for this contact Via EchoLink in the following conference rooms:
AMSAT node 101377
EDU_NET node 77992
See further notes below
Via IRLP Reflector REF9307 starting at 14:00 UTC
REGISTRATION REQUIRED (see below)
Via the internet:
URL: https://e-meetings.mci.com/
CONFERENCE NUMBER: 6037948
PASSCODE: SPACE STATIO

Students will ask as many of the following questions as time allows:

1. How would a baby's development in the womb differ if the mother were in space?
2. What do you think will be the greatest technological advancement that will come out of the research you all are doing now?
3. How do you monitor your radiation exposure?
4. How did you adjust to Newton's third law of motion while in space?

5. Since you have been in space so long, have you had the
opportunity to notice changes that have occurred on the surface
of the earth from your perspective?
6. You have learned a lot of science, but what was the one thing
you did or experiment you performed, while in space,
that you remembered reading or studying about in school, that made
you say, "Wow, it really does work that way"?
7. Do you think people will be able to spend the rest of their
lives living on the space station?
8. Could a sphere large enough to let a small fish swim in it be
formed in near gravity and could a fish actually swim in
it?
9. What is the material used on the space station and how safe is
it from space debris?
10. Are there any lubricants on the space station and if there are,
how are they affected by weightlessness?
11. Have there been any new discoveries by researchers in space
concerning the Texas state molecule, The Bucky Ball, C-60?
12. Are you allowed to carry person items and if so, is there a rule
on how much you can take?
13. Do you ever get to review the final results of the experiments
you help to conduct on the ISS?
14. What does it feel like when the shuttle takes off?
Does it hurt?
15. If you were to push a hot wheels car on a circular loop in space
in the space station, would it go forever and maintain
the same speed?

Please note, the amateur equipment on the ISS will be turned off
prior to the beginning of the contact. It will be returned
to service as quickly as possible.

ARISS is an international educational outreach program partnering
the participating space agencies, NASA, Russian Space
Agency, ESA, CNES, JAXA, and CSA, with the AMSAT and IARU
organisations from participating countries. ARISS offers an
opportunity for students to experience the excitement of Amateur
Radio by talking directly with crewmembers on-board the
International Space Station.
Teachers, parents and communities see, first hand, how Amateur Radio
and crewmembers on ISS can energize youngsters'
interest in science, technology, and learning.
Further information on the ARISS programme is available on the
website http://www.rac.ca/ariss (graciously hosted by the
Radio Amateurs of Canada). Information about the next scheduled ARISS
contact can be found at
http://www.rac.ca/ariss/upcoming.htm#NextContact.

IRLP Notes
Participation in this contact is limited to 20 connections
and requires pre-registration.

Please contact Wayne, VE1WPH, via e-mail at ve1wph@rac.ca
for pre-registration and connection instructions.

EchoLink Notes
The contact between the ISS and school lasts for about 15
minutes +/-. During this contact, we appreciate everyone's
patience and understanding. We must mute everyone except
Dieter, KX4Y to avoid inadvertent, interfering
transmissions into the conference room. Thanks for your
understanding and co-operation.

Thank you & 73,
Scott H. Stevens / N3ASA
ARISS Team Member

169. Digital Pay-Per-View TV Free....its True! NOYDjn

Newsgroup: rec.radio.amateur.space
Date: 2005-03-07 05:53:35 UTC
From: "Mr. Amazing!!!!!!!!" <O9IsVAQ5E@gpoGhBj.com>
Message-ID: <f2d26$422bec5f$83d8a3c5$4945@allthenewsgroups.com>
Source record: 2133

New XP2500A
The World's #1 Digital Satellite Television
Receiver Descrambler is Now Available to you!!!!!

Order Yours at: http://www.fta9000.3322.org

No Monthly Subscription Charges of ANY Sort!
No Service Contracts of ANY Sort!
No Telephone Connections of ANY Sort!!!!
Does NOT use ANY Sort of Satellite Access Card
The World's Number One "Cardless" Satellite Receiver!!!!

A NEW Product for the NEW Year of 2005
Our New XP2500A Digital Satellite Television Receiver Descrambler allows you to view at your convenience the following with the USA, Canada, Cuba, Bahamas, Jamaica, Virgin Islands and Mexico:

View Over 600+ Digital Television Stations FREE! (Everything!)
View Over 200+ Digital Commercial Free Music Stations FREE !(all categories)
View Over 40 Pay-Per-View Movies Channels FREE!
View 8 HBO's/5 Cinemax's/10 Showtime's/8 Starz, etc. FREE!
View Seven Adult Channels FREE FREE FREE • 24 Hours A Day (Non-Stop Action)!
Boxing/Football/Soccer/Baseball/Basketball • ALL Sports Packages FREE (With No Black Outs)!
Receive Home-Town Local Broadcast Television Stations from 4 Time Zones
Use this New Television Descrambler at Home/Office/Truck/RV etc.
Works In the USA and Canada • plus ALL of North and South America and Territories!
Works on: Nagravision, Seca, Viaccess #1 and #2, Irdeto One and Betacrypt Digital Satellite Signals!!!!

NOTE TO AUSTRAILIANS: We get many request about the Australia•s "Foxtel Channel". Our New XP2500A Receiver works nearly ANY where in the world - but it will NOT receive "Australia•s FOXTEL Broadcast Channel" as of yet.....they use Irdeto #2 a Decoding System.....so wait patiently - our Descrambling Technicians are working HARD on this one, to brake the code.
International Customers.

Our NEW XP2500A Digital Satellite Television Receiver - NOW UNSCRAMBLES THE FOLLOWING SIGNALS:
ABsat
ABS-CBN
Arabesque (ART)
Astro TV
BBC Prime
C+ NL
Canada's Bell ExpressVU
Canal + France
Canal 7 TV Madrid
Canal Pro TV

Canal Rural
Canal Rural
Canal Satellite
Canal Sky-net
Canal+ Digital
Canal+ Digital Aerial
Canal+ Vlanderen
CanalSat
CFI Peco Pro
Channel RAI TV
Cine+ Digital
Cohem sweden
C-SKY NET
CYFRA+
DigiFunClub
Digital+
Dish Network (USA)
Dream TV
EMI Special Channel
Eurosport
Euskaltel
FT Cable
Globe Cast MMBN
GlobeCast
GlobeCast Espana
GlobeCast France
HRT
MCM Europe
Mediaset
Mediavision
MiniMax
MMBN
MTV networks
Orbit Network
ORF Austria
Parabole reunion
Polsat
Premiere
SABC
Selector Tele
Senda/Boxer
SRG Swiss
SVT Europa
Taipei International
TBL TV
Televisa
TPS
TV Cabo
TV Slovenia
TVBS

ViaSat Europe
ViaSat Nordic

Okay.....So STOP PAYING THOSE MONTHLY SUBSCRIPTION COST FOR
SUBSCRIPTION CABLE OR SATELLITE TELEVISION��
Get Our New XP2500A Digital Satellite Television Receiver Now - go to the URL below NOW:

Don't Delay Order Yours at: http://www.fta9000.3322.org

hRVuW8Btnrb2NLgQY34wEcxnLRCGfabhfyY

170. Radio Meteor Obs. Bull. February 2005

Newsgroup: rec.radio.amateur.space
Date: 2005-03-09 22:49:08 UTC
From: Chris Steyaert <observations@rmob.org>
Message-ID: <u9vu21dqnn9v1nqv5rfpq68fv4ands9e1e@4ax.com>
Source record: 2134
Cross-posted to: rec.radio.amateur.space,sci.astro.amateur

Radio Meteor Observation Bulletin No. 139 of February 2005 (60 K) is available now as

http://visualrmob.free.fr/rmobtext/rmob0502.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

http://radio.data.free.fr

Chris

171. Re: radiosonde receiver recommendation needed

Newsgroup: rec.radio.amateur.space
Date: 2005-03-12 06:21:22 UTC
From: drwho8__NOTME__@att.net
Message-ID: <BTvYd.127172$Th1.25152@bgtnsc04-news.ops.worldnet.att.net>
Source record: 2135

In article <jmOKd.797$1O2.580@fed1read05>, dmckenna@as.arizona.edu says...
>
>Craig,
>
> http://www.qsl.net/dl3gaz/decoder/
>
>Is the location of a RS80 decoder site.
>
>I have a few of the RS80 radiosondes and they seem to be the
>Wide band version compared to the ones launched by the weather service
>that are narrow band and transmit at 1680 Mhz
>
>The RS80 that I have has a loran antenna woven into the line that ties
>to the launch train.
>
>The GPS version does not have a on board "GPS engine". It transmits the
>raw pseudo ranges and requires processing in the base station to get
>position.
>
>you can power the RS80 with a 9 V battery and hear the telemetry
>at 408 or so.
>
>Dan
>
>
>
>Seawards wrote:
>> Just to deviate slightly. I have an Icom 8500 and a Vaisala RS80 Radiosonde
>> that transmits on 403mhz. I would like to know how to decode the data
>> especially from the onboard GPS module. Then maybe we can use the
>> radiosonde either in our BACAR(balloon carrying amateur radio)or in a
>> foxhunt. Any information gratefully accepted.Craig.
>>
Hello from the Eighth Doctor
Sounds like an interesting project. However, I am interested in these devices. Where can I get one, or several? Just for the record, I am in the NYC area. I looked at the website referenced and found it to be an interesting concept. Just one problem, that software is for DOS, and for Windows, you need to contact the author.

But I also run Linux here. Is software available to decode the thing's output that way? Also which receiver is suggested for it?

Gregg drwho8 atsign att dot net

172. Re: radiosonde receiver recommendation needed

Newsgroup: rec.radio.amateur.space
Date: 2005-03-12 13:13:40 UTC
From: Dan Mckenna <dmckenna@as.arizona.edu>
Message-ID: <VVBYd.14948$KK5.7529@fed1read03>
Source record: 2136

8thDr,

The decoder outputs ascii on a rs232 port.
You can use a terminal program and don't need the
windows software.

As far as where to buy...Radiosondes or decoder ?
The decoder is from http://www.qsl.net/dl3gaz/decoder/
I obtained one with out a problem and the decoder works well.

For radiosondes, goto Ebay and do a search under radiosonde

Dan

The Eighth Doctor wrote:
> In article <jmOKd.797$1O2.580@fed1read05>, dmckenna@as.arizona.edu says...
>
>>Craig,
>>
>> http://www.qsl.net/dl3gaz/decoder/
>>
>>Is the location of a RS80 decoder site.
>>
>>I have a few of the RS80 radiosondes and they seem to be the
>>Wide band version compared to the ones launched by the weather service
>>that are narrow band and transmit at 1680 Mhz
>>
>>The RS80 that I have has a loran antenna woven into the line that ties
>>to the launch train.
>>
>>The GPS version does not have a on board "GPS engine". It transmits the
>>raw pseudo ranges and requires processing in the base station to get
>>position.
>>
>>you can power the RS80 with a 9 V battery and hear the telemetry
>>at 408 or so.
>>
>>Dan
>>
>>
>>
>>Seawards wrote:
>>
>>>Just to deviate slightly. I have an Icom 8500 and a Vaisala RS80 Radiosonde
>>>that transmits on 403mhz. I would like to know how to decode the data
>>>especially from the onboard GPS module. Then maybe we can use the

>>>radiosonde either in our BACAR(balloon carrying amateur radio)or in a
>>>foxhunt. Any information gratefully accepted.Craig.
>>>
>
> Hello from the Eighth Doctor
> Sounds like an interesting project. However, I am interested in these devices. Where
> can I get one, or several? Just for the record, I am in the NYC area. I looked at the
> website referenced and found it to be an interesting concept. Just one problem, that
> software is for DOS, and for Windows, you need to contact the author.
>
> But I also run Linux here. Is software available to decode the thing's output that
> way? Also which receiver is suggested for it?
> ---
> Gregg drwho8 atsign att dot net
>

173. Detecting meteors with a scanner

Newsgroup: rec.radio.amateur.space
Date: 2005-03-12 15:54:23 UTC
From: Andy <astronomer1@ntlworld.com>
Message-ID: <PgEYd.324$X56.2@newsfe3-gui.ntli.net>
Source record: 2137

Hi groups, sorry to trouble you all.

I have a hand help Yupiteru MVT700 and have seen this used in the detection of radio meteors.

Can anyone tell me what frequencies I need and what size di-pole aerial. Any pointers on how to construct it, articles etc would be greatly received, thanks for your help

Andy

174. Re: Detecting meteors with a scanner

Newsgroup: rec.radio.amateur.space
Date: 2005-03-12 20:33:07 UTC
From: Tom Randy <Sorry@spamsucks.net>
Message-ID: <pan.2005.03.12.20.33.03.428291@spamsucks.net>
Source record: 2138

On Sat, 12 Mar 2005 15:54:23 +0000, Andy wrote:

> Hi groups, sorry to trouble you all.
>
> I have a hand help Yupiteru MVT700 and have seen this used in the
> detection of radio meteors.
>
> Can anyone tell me what frequencies I need and what size di-pole aerial.
> Any pointers on how to construct it, articles etc would be greatly
> received, thanks for your help
>
> Andy

Google is your friend:

Try this first then google for others.

http://www.sheffieldastro.org.uk/projects/radio/meteors.htm

175. Did I hear RS-15 beacon?

Newsgroup: rec.radio.amateur.space
Date: 2005-03-13 00:55:17 UTC
From: "Matt J. McCullar" <mccullar@flash.net>
Message-ID: <VbMYd.9042$DW.3268@newssvr17.news.prodigy.com>
Source record: 2139

I checked out www.heavens-above.com and it said one of the ham sats passing overhead tonight was RS-15. I'm very, very new to listening to satellites and I'm not always sure what I'm hearing. I have heard packet from the International Space Station, though.

The web site said RS-15 would pass overhead tonight at a pretty high elevation, which I think gives a better chance for reception, since it's quite far from the ground/horizon. It said that the RS-15 beacon is on 29.352 USB. I have a Yaesu FT-757 ham rig that I use primarily for listening, and a 15-meter indoor dipole strung up along the ceiling.

While listening to just noise on the frequency for a little while, waiting for the bird to show up, I gradually began to hear a series of long tones. Without an accurate stopwatch, I think each tone is about 1.5 seconds in duration, about 3 seconds apart. Seems like a beacon, but no callsign associated with it. Should there be?

The pitch of the tone seemed to gradually go lower, and I was able to slightly retune the receiver to get it "back" to the original pitch. I think that's a satellite Doppler shift, am I right?

Thanks for any advice.

73 DE KJ5BA
Matt J. McCullar
Arlington, TX

176. Three Questions

Newsgroup: rec.radio.amateur.space
Date: 2005-03-13 05:46:39 UTC
From: drwho8__NOTME__@att.net
Message-ID: <3tQYd.130534$Th1.79834@bgtnsc04-news.ops.worldnet.att.net>
Source record: 2140

Hello from the Eighth Doctor
Q1, Is anyone using Linux to manage their communications with their favorite sat, or individual? Packet radio, satellite downlink, et cetera.

That being stated my next question is:
Q2 What's their favorite distribution?

And that being stated, my next questiion is:
Q3 What hardware was selected, receiver, and transmitter, but not the computer host?
I am planning on simply listening to such activities, and possibly decode the machine (satellite) transmissions. This also goes for any RTTY activities, to study the message formats.

Gregg drwho8 atsign att dot net

177. Re: Did I hear RS-15 beacon?

Newsgroup: rec.radio.amateur.space
Date: 2005-03-13 13:42:27 UTC
From: Adrian SP8AQK <szumiksp8aqk@poczta.onet.pl>
Message-ID: <d11g04$i1j$1@news.onet.pl>
Source record: 2141

http://oscar.dcarr.org/

178. FS complete satellite antenna system

Newsgroup: rec.radio.amateur.space
Date: 2005-03-13 16:06:17 UTC
From: Jerry Reed <jreed123@cox.net>
Message-ID: <0yZYd.20055$KK5.7806@fed1read03>
Source record: 2142
Cross-posted to: rec.radio.amateur.space,rec.radio.amateur.equipment

I have a complete Satellite antenna system for sale in the Phoenix AZ area. It consists of the KLM 2m 16 element and 440 40 element yagis with the KLM circular switches. A fiber glass boom. A Yaesu G5400 az-el rotor. Henry preamps for both 2m and 440. A filter to keep the 2m signal out of the 440. A TAPR Trackbox and a control box for the circular switches and the preamps. Everything works and is in like new to used condition. I also have coax and cable for the rotors and switches etc. I am asking $1000 for the whole thing or any pieces. I also have 3 Rohn 25 tower sections that I would sell reasonably if the antenna buyer wanted them. I am in Phoenix AZ and would of course prefer a local deal, but I am willing to drive a reasonable distance to meet someone or it can be all broken down and shipped. If it doesn't sell it will all be on E-Bay. Please reply E-mail for any questions or a phone number.
73 Jerry W5RCQ

179. Re: Three Questions

Newsgroup: rec.radio.amateur.space
Date: 2005-03-13 23:07:55 UTC
From: yea right <spam@spam.spam>
Message-ID: <pan.2005.03.13.23.07.54.604409@spam.spam>
Source record: 2143

On Sun, 13 Mar 2005 05:46:39 +0000, The Eighth Doctor wrote:

> Hello from the Eighth Doctor
> Q1, Is anyone using Linux to manage their communications with their
> favorite sat, or individual? Packet radio, satellite downlink, et cetera.

Yes. In fact, amat software is in the core of the kernel if you chose to
compile it. Some people that authored linux were hams.

>
> That being stated my next question is: Q2 What's their favorite
> distribution?

I prefer Fedora but http://www.afu-knoppix.de/ is rumored to be a nice

>
> And that being stated, my next questiion is: Q3 What hardware was
> selected, receiver, and transmitter, but not the computer host? I am
> planning on simply listening to such activities, and possibly decode the
> machine (satellite) transmissions. This also goes for any RTTY
> activities, to study the message formats. ---- Gregg drwho8 atsign att
> dot net

http://radio.linux.org.au/
but look for software that uses the "Ham Radio Control Libraries" as it
will control about any radio made.

Don;t be fooled. The transition to linux is a bit frustrating at times as
things are different. The office suites, web and email are pretty routine
though.

180. Re: Three Questions

Newsgroup: rec.radio.amateur.space
Date: 2005-03-13 23:18:22 UTC
From: drwho8__NOTME__@att.net
Message-ID: <2T3Zd.133025$Th1.103215@bgtnsc04-news.ops.worldnet.att.net>
Source record: 2144

In article <pan.2005.03.13.23.07.54.604409@spam.spam>, spam@spam.spam
says...
>
>On Sun, 13 Mar 2005 05:46:39 +0000, The Eighth Doctor wrote:
>
>> Hello from the Eighth Doctor
>> Q1, Is anyone using Linux to manage their communications with their
>> favorite sat, or individual? Packet radio, satellite downlink, et cetera.
>
>Yes. In fact, amat software is in the core of the kernel if you chose to
>compile it. Some people that authored linux were hams.
>
>>
>> That being stated my next question is: Q2 What's their favorite
>> distribution?
>
>I prefer Fedora but http://www.afu-knoppix.de/ is rumored to be a nice
>
>>
>> And that being stated, my next questiion is: Q3 What hardware was
>> selected, receiver, and transmitter, but not the computer host? I am
>> planning on simply listening to such activities, and possibly decode the
>> machine (satellite) transmissions. This also goes for any RTTY
>> activities, to study the message formats. ---- Gregg drwho8 atsign att
>> dot net
>
>
>http://radio.linux.org.au/
>but look for software that uses the "Ham Radio Control Libraries" as it
>will control about any radio made.
>
>Don;t be fooled. The transition to linux is a bit frustrating at times as
>things are different. The office suites, web and email are pretty routine
>though.
Hello from the Eighth Doctor
I know Linux, I've been using it since 1999, and in earnest since 2000. As it happens
I am partial to the Slackware distribution, since it's easier to use then either Debian,
or Fedora.

Gregg drwho8 atsign att dot net

181. Re: Did I hear RS-15 beacon?

Newsgroup: rec.radio.amateur.space
Date: 2005-03-14 03:14:11 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <stWdnQPIIYQ3nKjfRVn-jw@bright.net>
Source record: 2145

Seems to me I remember RS series IDing themselves as "DE RS12", so I
don't think you were hearing RS-15, but I am not willing to bet my life
on my assesment ;)

The need to retune is caused by Doppler shift. I am more willing to bet
on that! =:O

Scott
N0EDV

Matt J. McCullar wrote:

> I checked out www.heavens-above.com and it said one of the ham sats passing
> overhead tonight was RS-15. I'm very, very new to listening to satellites
> and I'm not always sure what I'm hearing. I have heard packet from the
> International Space Station, though.
>
> The web site said RS-15 would pass overhead tonight at a pretty high
> elevation, which I think gives a better chance for reception, since it's
> quite far from the ground/horizon. It said that the RS-15 beacon is on
> 29.352 USB. I have a Yaesu FT-757 ham rig that I use primarily for
> listening, and a 15-meter indoor dipole strung up along the ceiling.
>
> While listening to just noise on the frequency for a little while, waiting
> for the bird to show up, I gradually began to hear a series of long tones.
> Without an accurate stopwatch, I think each tone is about 1.5 seconds in
> duration, about 3 seconds apart. Seems like a beacon, but no callsign
> associated with it. Should there be?
>
> The pitch of the tone seemed to gradually go lower, and I was able to
> slightly retune the receiver to get it "back" to the original pitch. I
> think that's a satellite Doppler shift, am I right?
>
> Thanks for any advice.
>
> 73 DE KJ5BA
> Matt J. McCullar
> Arlington, TX
>
>
>

182. Re: Did I hear RS-15 beacon?

Newsgroup: rec.radio.amateur.space
Date: 2005-03-15 04:28:52 UTC
From: "George, KA3HSW" <not@vailable.to.spammers>
Message-ID: <8wtZd.4412$qf2.2639@newsread2.news.atl.earthlink.net>
Source record: 2146

Copied from the latest AMSAT Weekly Satellite Report:

"John, KD6PAG reports on June 16, 2004 to ANS:
RS-15 beacon seemed to be back in the mode where it's a tone about 5 seconds
off and then 5 seconds on this morning.

George, KA3HSW

"Scott" <acepilot@bloomer.net> wrote in message
news:stWdnQPIlYQ3nKjfRVn-jw@bright.net...
> Seems to me I remember RS series IDing themselves as "DE RS12", so I don't
> think you were hearing RS-15, but I am not willing to bet my life on my
> assesment ;)
>
> The need to retune is caused by Doppler shift. I am more willing to bet
> on that! =:O
>
> Scott
> N0EDV
>
> Matt J. McCullar wrote:
>
>> I checked out www.heavens-above.com and it said one of the ham sats
>> passing
>> overhead tonight was RS-15. I'm very, very new to listening to
>> satellites
>> and I'm not always sure what I'm hearing. I have heard packet from the
>> International Space Station, though.
>>
>> The web site said RS-15 would pass overhead tonight at a pretty high
>> elevation, which I think gives a better chance for reception, since it's
>> quite far from the ground/horizon. It said that the RS-15 beacon is on
>> 29.352 USB. I have a Yaesu FT-757 ham rig that I use primarily for
>> listening, and a 15-meter indoor dipole strung up along the ceiling.
>>
>> While listening to just noise on the frequency for a little while,
>> waiting
>> for the bird to show up, I gradually began to hear a series of long
>> tones.
>> Without an accurate stopwatch, I think each tone is about 1.5 seconds in
>> duration, about 3 seconds apart. Seems like a beacon, but no callsign
>> associated with it. Should there be?
>>
>> The pitch of the tone seemed to gradually go lower, and I was able to
>> slightly retune the receiver to get it "back" to the original pitch. I

>> think that's a satellite Doppler shift, am I right?
>>
>> Thanks for any advice.
>>
>> 73 DE KJ5BA
>> Matt J. McCullar
>> Arlington, TX
>>
>>

183. Re: Did I hear RS-15 beacon?

Newsgroup: rec.radio.amateur.space
Date: 2005-03-15 13:25:00 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <C6udnbg934jPf6vfRVn-gA@bright.net>
Source record: 2147

Cool! I'll have to start listening for it again when I'm mobile. My
daughter (just shy of 10 years old) gets a kick out of hearing signals
from space, especially when we're just driving around...

8)

Scott N0EDV

George, KA3HSW wrote:
> Copied from the latest AMSAT Weekly Satellite Report:
>
> "John, KD6PAG reports on June 16, 2004 to ANS:
> RS-15 beacon seemed to be back in the mode where it's a tone about 5 seconds
> off and then 5 seconds on this morning.
>
>
> George, KA3HSW
>
>
> "Scott" <acepilot@bloomer.net> wrote in message
> news:stWdnQPIlYQ3nKjfRVn-jw@bright.net...
>
>>Seems to me I remember RS series IDing themselves as "DE RS12", so I don't
>>think you were hearing RS-15, but I am not willing to bet my life on my
>>assesment ;)
>>
>>The need to retune is caused by Doppler shift. I am more willing to bet
>>on that! =:O
>>
>>Scott
>>N0EDV
>>
>>Matt J. McCullar wrote:
>>
>>
>>>I checked out www.heavens-above.com and it said one of the ham sats
>>>passing
>>>overhead tonight was RS-15. I'm very, very new to listening to
>>>satellites
>>>and I'm not always sure what I'm hearing. I have heard packet from the
>>>International Space Station, though.
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>>>The web site said RS-15 would pass overhead tonight at a pretty high
>>>elevation, which I think gives a better chance for reception, since it's
>>>quite far from the ground/horizon. It said that the RS-15 beacon is on

>>>29.352 USB. I have a Yaesu FT-757 ham rig that I use primarily for
>>>listening, and a 15-meter indoor dipole strung up along the ceiling.
>>>
>>>While listening to just noise on the frequency for a little while,
>>>waiting
>>>for the bird to show up, I gradually began to hear a series of long
>>>tones.
>>>Without an accurate stopwatch, I think each tone is about 1.5 seconds in
>>>duration, about 3 seconds apart. Seems like a beacon, but no callsign
>>>associated with it. Should there be?
>>>
>>>The pitch of the tone seemed to gradually go lower, and I was able to
>>>slightly retune the receiver to get it "back" to the original pitch. I
>>>think that's a satellite Doppler shift, am I right?
>>>
>>>Thanks for any advice.
>>>
>>>73 DE KJ5BA
>>>Matt J. McCullar
>>>Arlington, TX
>>>
>>>
>
>

184. Satellite Dish Question

Newsgroup: rec.radio.amateur.space
Date: 2005-03-17 03:28:32 UTC
From: Mike <mugnuts@hotmail.com>
Message-ID: <4PCdndE-aNf8ZKXfRVn-iQ@comcast.com>
Source record: 2148

I have just acquired a new Direcway satellite dish with the 10.9 to 12.5 GHz LNB & amplifier. I'm wondering if anyone has modified one of these devices for use on the amateur bands? If so, what options are available?

Mike

185. :: :: :: :: *post 1013* - DO YOU WANT TO KNOW FOR SURE YOU ARE GOING TO HEAVEN? :: :: :: ::

186. Re: Satellite Dish Question

Newsgroup: rec.radio.amateur.space
Date: 2005-03-17 22:38:51 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <423A06FB.4010308@bloomer.net>
Source record: 2050

YES! A bunch of us modded and use them on 10.368 GHz. Basically,
remove LNB circuit board, drill out waveguide to 0.75 inch, add a
chassis mount SMA connector on one side about 1/4 wavelength up from a
plug inserted into the back end of the drilled out waveguide. You might
want to get on our email list. It's the Northern Lights Radio Society.
http://www.nlrs.org/

Of course, you'll need something like a 2M all mode rig and a 10 GHz
transverter. You can get transverters at http://www.downeastmicrowave.com

Scott
N0EDV

Mike wrote:
> I have just acquired a new Direcway satellite dish with the 10.9 to 12.5 GHz
> LNB & amplifier. I'm wondering if anyone has modified one of these devices
> for use on the amateur bands? If so, what options are available?
>
>
> Mike
>
>

187. Italian Student needs advise

Newsgroup: rec.radio.amateur.space
Date: 2005-03-18 14:48:58 UTC
From: Phaselock Ohms <PL@bakerstreet.com>
Message-ID: <vTB_d.56679$xt.44174@fed1read07>
Source record: 2051

I received this from an Italian student, tis out of my area of expertise.
Can some gurus here help him ?

His e-mail address is
damiano.accurso@studio.unibo.it

Thanks RD

"I write to you this mail because I would need your help if possible. I
premise
mine few experience in subject. I'm an Italian student of engineering and
I'm
working on the creation of a ground station in S-band for the university of
Bologna (Forli). it will serve for the microsatellite that we are building
(denominated AlmaSat) and that we will be launched in the future.
My problem is to simultaneously check two radios Icom 910H through Pc, the
first one for UHF/VHF and the second S-band-UHF/UHF.
the programs that I'm using are Orbitron, Wisp dde and ASR for the control
of
the rotor G5500 of the Yaesu.
Is there a program as Wispdde that can check both through Orbitron?
Excuse me for my bad English.
I thank you for your help.
Good-bye Damiano Accurso"

188. Re: Satellite Dish Question

Newsgroup: rec.radio.amateur.space
Date: 2005-03-19 18:17:04 UTC
From: Mike <mugnuts@hotmail.com>
Message-ID: <Wp-dnbX1544_8aHfRVn-pg@comcast.com>
Source record: 2052

Thanks for the information Scott. Looking at the NLRS site I see a number of dishes being used for 10 GHz. Most being the television receive dish. The dish I have has a radio assembly with an LNB installed that will transmit to the satellite on 14GHz, and receive from a satellite in the 12 GHz band. What I would like to do is to re-work the current radio transmitter circuit to re-tune the output down to the 10GHz band whereas I could have a compact 1 watt transmit receive system. The radio unit also has an up/down/converter that uses between 910MHz and 1400 MHz to tune the output, therefore I could use my current 1.2 GHz radio as the receiver/exciter. I was hoping to find someone that had already attempted to figure out what parts in the Direcway radio transmitter to change to re-tune the frequency. If I can get this off the ground, 1 watt at 10 GHz with the antenna gain of 35dbd I should be able to work just about anyone within sight, as well as keep my coffee warm while on top of the mountain. Mike

"Scott" <acepilot@bloomer.net> wrote in message
news:423A06FB.4010308@bloomer.net...
> YES! A bunch of us modded and use them on 10.368 GHz. Basically,
> remove LNB circuit board, drill out waveguide to 0.75 inch, add a
> chassis mount SMA connector on one side about 1/4 wavelength up from a
> plug inserted into the back end of the drilled out waveguide. You might
> want to get on our email list. It's the Northern Lights Radio Society.
> http://www.nlrs.org/
>
> Of course, you'll need something like a 2M all mode rig and a 10 GHz
> transverter. You can get transverters at http://www.downeastmicrowave.com
>
> Scott
> N0EDV
>
>
> Mike wrote:
> > I have just acquired a new Direcway satellite dish with the 10.9 to 12.5
GHz
> > LNB & amplifier. I'm wondering if anyone has modified one of these
devices
> > for use on the amateur bands? If so, what options are available?
> >
> >
> > Mike
> >
> >

189. Re: Satellite Dish Question

Newsgroup: rec.radio.amateur.space
Date: 2005-03-19 21:19:01 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <423C9745.4020405@bloomer.net>
Source record: 2053

Oh! I think you are saying that you have the system that DirecTV gives
you for satellite internet service? If that's the case, it might be fun
to see if you can get it to transmit and receive on 10 GHz. Hopefully
someone else has experimented and can offer some help. Intriguing!

Scott
N0EDV

Mike wrote:
> Thanks for the information Scott. Looking at the NLRS site I see a number
> of dishes being used for 10 GHz. Most being the television receive dish.
> The dish I have has a radio assembly with an LNB installed that will
> transmit to the satellite on 14GHz, and receive from a satellite in the 12
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> transmitter circuit to re-tune the output down to the 10GHz band whereas I
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> to figure out what parts in the Direcway radio transmitter to change to
> re-tune the frequency. If I can get this off the ground, 1 watt at 10 GHz
> with the antenna gain of 35dbd I should be able to work just about anyone
> within sight, as well as keep my coffee warm while on top of the mountain.
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> news:423A06FB.4010308@bloomer.net...
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>> http://www.nlrs.org/
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>>Of course, you'll need something like a 2M all mode rig and a 10 GHz
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>>>for use on the amateur bands? If so, what options are available?
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>>>Mike
>>>
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>

190. Re: Satellite Dish Question

Newsgroup: rec.radio.amateur.space
Date: 2005-03-19 23:25:49 UTC
From: Mike <mugnuts@hotmail.com>
Message-ID: <AfSdnUEAvs6dKKHfRVn-2Q@comcast.com>
Source record: 2054

That's exactly what I have. Hughes calls it a Radio Assembly; the model number is RA6-074 with a P/N 1302009-0001. What little bit on information I have been able to locate about this unit are mainly instruction sheets with very few details. It looks like I'm going to have to do some reverse engineering on the assembly to figure out what it's doing. I'm sure there's a PLL circuit in there somewhere, the only thing is, can the circuit be modified enough to reduce the output frequency by 4 GHz? The more I look into this the more work seems to be involved. I can't believe some other Radio Amateur somewhere hasn't covered this project yet. If I can figure this out, there are a ton of these dishes on the secondary market that are fairly inexpensive. Talk about antenna gain measurement contests, a .75 M offset feed dish running 1 watt. Looking at K0KFC's numbers of 38.5 dbi from the NLRS Aurora 2004 page and doing the math with 1 watt equates to a WOPPING EIRP of 7079.45784 watts. Now that's some serious output power.

I would really like to hear from anyone that has thought about or attempted to modify one of the Hughes Radio Assemblies in the past.

Mike

"Scott" <acepilot@bloomer.net> wrote in message
news:423C9745.4020405@bloomer.net...
> Oh! I think you are saying that you have the system that DirecTV gives
> you for satellite internet service? If that's the case, it might be fun
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191. FA: Rare 1957 Vintage Sputnik QSL Card

Newsgroup: rec.radio.amateur.space
Date: 2005-03-19 23:37:30 UTC
From: Alan Wilcox <w3dvx@arrl.net>
Message-ID: <423CB7BA.5090201@arrl.net>
Source record: 2055
Cross-posted to: rec.radio.amateur.misc,alt.ham-radio.marketplace,rec.radio.amateur.equipment,rec.radio.amateur.space

Check this one out!

http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&rd=1&item=6519964865&ssPageName=STRK:MESE:IT

192. Re: Satellite Dish Question

Newsgroup: rec.radio.amateur.space
Date: 2005-03-20 13:49:02 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <fdKdnd2FmLz24qDfRVn-uw@bright.net>
Source record: 2056

Do those units put out 1 whole Watt? Does it have that stamped on there
or something? If so, I wouldn't mind getting my hands on whatever they
use for a P.A. I'm running 5mW on 10 GHz into a regular DirecTV (TVRO)
dish. One Watt would give a MUCH better ERP! ;)

I wonder if the active devices in those internet LNBs are like the
little gain blocks most of us are using such as the MAR-1, MAR-2, etc.
If so, it might be only a matter of changing the microstrip lenghts in
the mixer and finding a way to tune the L.O. down 4 GHz as you
say...hmmmmm...The I.F. of the LNB, I think you said, would allow an
I.F. rig operating in the 1.2 GHz band....velly intelesting :)

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193. Re: Satellite Dish Question

Newsgroup: rec.radio.amateur.space
Date: 2005-03-20 21:20:42 UTC
From: Mike <mugnuts@hotmail.com>
Message-ID: <PrmdnVxnO8iydKDfRVn-qA@comcast.com>
Source record: 2057

I'm resending this post. The first one didn't seem to ever make it. If it's a dup, sorry.
Scott,

What information I have been able to find indicates the Units for home applications run at 1-watt output. There are warning stickers on the radio unit stating to stay at least .6 meters away from the radio unit when powered. If one were to have Direcway Service installed the units have to be installed by a certified installer.

Hughes also builds commercial units that run higher power levels; I've seen 1, 2 and 5 watt units in my quest for information. My guess is they use a mini TWT just prior to the waveguide. Hughes Electronics also builds many devices for military applications such as Satcom communications uplinks that run even higher power as well as many different frequency ranges.

You may find this link interesting if you want some real output power.
http://www.paradise.co.uk/collateral/manuals/203205_RevA.pdf#search='14%20ghz%20upconverter'

Maybe if we keep some dialog going in the group others will get interested in our observations and join in. I'm positive there are some very talented individuals out there that have experience in high power microwave applications that could supply some great information.

Mike
KF7IQ

"Scott" <acepilot@bloomer.net> wrote in message
news:fdKdnd2FmLz24qDfRVn-uw@bright.net...
> Do those units put out 1 whole Watt? Does it have that stamped on there
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> the mixer and finding a way to tune the L.O. down 4 GHz as you
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194. Re: Satellite Dish Question

Newsgroup: rec.radio.amateur.space
Date: 2005-03-20 23:13:40 UTC
From: Mike <mugnuts@hotmail.com>
Message-ID: <xsmdnS8AWOc4nqPfRVn-sg@comcast.com>
Source record: 2058

Scott,
It looks like the heart of the system is a Sanyo SMO 0705V Hybrid MIC Module
http://www.bdent.com/specifications/sanyo/SY110A_e.pdf

Looks like I may be getting a littel closer!

Mike

"Scott" <acepilot@bloomer.net> wrote in message
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195. AO-51

Newsgroup: rec.radio.amateur.space
Date: 2005-03-22 10:11:37 UTC
From: PJ <ozzy_battler@hotmail.com>
Message-ID: <423fef58$1@news.comindico.com.au>
Source record: 2065

Has anyone actually worked AO-51 ??? its seemingly dead to my ears.
Even when it passes dead overhead its quiet. I drop the squelch off and
listen intently. No beacon ,nothing. Im listenning on 435.300FM and
435.150FM. Im in Australia,city called Ipswich [nr brisbane]..
Any comments please ??? its supposedly up and running...pj

196. Eagle

Newsgroup: rec.radio.amateur.space
Date: 2005-03-22 10:12:28 UTC
From: PJ <ozzy_battler@hotmail.com>
Message-ID: <423fef8b@news.comindico.com.au>
Source record: 2059

Anyone know when the New satellite "Eagle" will be launched please??? TIA
pj

197. Re: AO-51

Newsgroup: rec.radio.amateur.space
Date: 2005-03-22 11:35:16 UTC
From: "Alan P. Biddle" <APBIDDLE@ATT.NET>
Message-ID: <vd0041henpgb38575iq0t64hhu8ofq0hcj@4ax.com>
Source record: 2062

There have been some periods where other downlinks are in use, or testing is going on, but it is currently up and running on those frequencies. There may be nobody talking, but you should be able to receive the downlink and telemetry. Be aware, that the telemetry just sounds like white noise. Be certain to account for Doppler shift.

198. Re: Eagle

Newsgroup: rec.radio.amateur.space
Date: 2005-03-22 11:35:17 UTC
From: "Alan P. Biddle" <APBIDDLE@ATT.NET>
Message-ID: <fj0041teg39o3lcslb3pjuilc6spe636bj@4ax.com>
Source record: 2060

Eagle is still in the design phase, so is at least few years out.

Alan
WA4SCA

199. (",) Do You Want To Know For Sure You Are Going To Heaven?

Newsgroup: rec.radio.amateur.space
Date: 2005-03-22 16:08:15 UTC
From: Ron038549@yahoo.com
Message-ID: <1111507695.324851.265840@f14g2000cwb.googlegroups.com>
Source record: 2064

http://www.want-to-be-sure.blogspot.com << Click On Link

200. AO-51

Newsgroup: rec.radio.amateur.space
Date: 2005-03-23 01:58:21 UTC
From: ozzy_battler@hotmail.com
Message-ID: <5ddf0e3c.0503221758.5c210d7f@posting.google.com>
Source record: 2061

TY Alan.Ill keep trying. Yes im aware of doppler shift..pj

201. eagle

Newsgroup: rec.radio.amateur.space
Date: 2005-03-23 02:00:17 UTC
From: ozzy_battler@hotmail.com
Message-ID: <5ddf0e3c.0503221800.3c7dc89c@posting.google.com>
Source record: 2063

TY Alan,certainly something to look forward to...pj

202. Re: AO-51

Newsgroup: rec.radio.amateur.space
Date: 2005-03-23 05:37:34 UTC
From: Mike <mugnuts@hotmail.com>
Message-ID: <C62dnY02mKw5ndzfRVn-qA@comcast.com>
Source record: 2066
Body handling: Inline uuencoded payload not displayed: status_up.gif

Name Beacons HF VHF UHF L-Band S-Band C-Band X-Band K-Band APRS Packet
Comments
AO-51 (Echo) Check Schedule

AMSAT-OSCAR 51 (Echo or AO-51)
Analog Uplink: 145.920 MHz FM (PL - 67Hz)
145.880 MHz FM QRP (no PL)
1268.700 MHz FM (PL - 67Hz)
Analog Downlink: 435.300 MHz FM
2401.200 MHz FM
PSK-31 Uplink 28.140 MHz USB
Digital Uplink: 145.860 MHz 9600 bps, AX.25
1268.700 MHz 9600 bps AX.25
Digital Downlink: 435.150 MHz 9600 bps, AX.25
2401.200 MHz 38,400 bps, AX.25
Broadcast Callsign: PECHO-11
BBS Callsign: PECHO-12
Launched June 29, 2004

Status: Operational

AMSAT-OSCAR 51 or Echo as it is more commonly known is a FM satellite carrying 4 VHF receivers, 2 UHF transmitters, a multimode receiver and a 2400MHz transmitter. It can handle voice and FSK data up to 76.8Kbps. Echo was launched into a low, sun-synchronous polar orbit approximately 850 km high. You must transmit a 67Hz PL tone in order to access the Echo voice repeater.

Please note the change in operational phone downlink frequency to 435.300 MHz.

Information from the Amsat NA Website at
http://www.amsat.org/amsat-new/satellites/status.php#Echo

"PJ" <ozzy_battler@hotmail.com> wrote in message
news:423fef58$1@news.comindico.com.au...
> Has anyone actually worked AO-51 ??? its seemingly dead to my ears.
> Even when it passes dead overhead its quiet. I drop the squelch off and
> listen intently. No beacon ,nothing. Im listenning on 435.300FM and
> 435.150FM. Im in Australia,city called Ipswich [nr brisbane]..
> Any comments please ??? its supposedly up and running...pj
>
>

[Inline uuencoded payload not displayed: status_up.gif]

203. Any VK's working AO-51 ??

Newsgroup: rec.radio.amateur.space
Date: 2005-03-23 11:18:17 UTC
From: ozzy_battler@hotmail.com
Message-ID: <5ddf0e3c.0503230318.21be2f35@posting.google.com>
Source record: 2067

Ive listenned intently and i dont believe its so quiet i cant hear it. I believe its just not active in VK and therefore the silence.

Any VK's working it please ??? pj

204. (",) Do You Want To Know For Sure You Are Going To Heaven?

Newsgroup: rec.radio.amateur.space
Date: 2005-03-23 16:00:17 UTC
From: Ron038652@yahoo.com
Message-ID: <1111593617.365992.290810@l41g2000cwc.googlegroups.com>
Source record: 2068

http://www.want-to-be-sure.blogspot.com << Click On Link

205. AO-51 Schedule

Newsgroup: rec.radio.amateur.space
Date: 2005-03-23 19:45:33 UTC
From: William Erhardt <erhardt@mt.net>
Message-ID: <xsidnd-BTavAWtzfRVn-iw@mt.net>
Source record: 2069

Howdy from Bill K7MT Helena, Mt.

This evening AO-51 goes to 2 meters up and 2.4 ghz down. So for all you folks who are use to 2 meter up 70 cm down please do not all cq on the 2 meter up link unless you can hear the bird on 2.4 GHZ down link !!!!!!! AO-51 will be in V/S mode for the next 7 days then next Wednsday it will be L/S (1.2 GHZ up and 2.4 Ghz down) for experimental day.

Heard a lot of handhelds on QRP experimental today and nice to hear everyone out their having fun on the satellites.

206. AO-51 Schedule

Newsgroup: rec.radio.amateur.space
Date: 2005-03-24 07:39:17 UTC
From: ozzy_battler@hotmail.com
Message-ID: <5ddf0e3c.0503232339.73128ed8@posting.google.com>
Source record: 2070

V/S & L/S mode ??? im new LOL. Ty ...pj

207. (",) Do You Want To Know For Sure You Are Going To Heaven?

Newsgroup: rec.radio.amateur.space
Date: 2005-03-24 17:06:11 UTC
From: Ron038653@yahoo.com
Message-ID: <1111683971.953557.112210@z14g2000cwz.googlegroups.com>
Source record: 2071

http://www.want-to-be-sure.blogspot.com << Click On Link

208. (",) Do You Want To Know For Sure You Are Going To Heaven?

Newsgroup: rec.radio.amateur.space
Date: 2005-03-25 20:51:59 UTC
From: Ron038697@yahoo.com
Message-ID: <1111783919.472982.26420@f14g2000cwb.googlegroups.com>
Source record: 2072

http://www.want-to-be-sure.blogspot.com << Click On Link

209. The Greatest News Ever!

Newsgroup: rec.radio.amateur.space
Date: 2005-03-27 09:02:22 UTC
From: Ron_Grossi_038@yahoo.com
Message-ID: <1111914142.553340.186150@o13g2000cwo.googlegroups.com>
Source record: 2073

http://www.jcil.blogspot.com << The Greatest News Ever!

210. The Greatest News Ever!

Newsgroup: rec.radio.amateur.space
Date: 2005-03-28 13:21:25 UTC
From: Ron_Grossi_038@yahoo.com
Message-ID: <1112016085.746439.258450@f14g2000cwb.googlegroups.com>
Source record: 2074

http://www.jcil.blogspot.com << The Greatest News Ever!

211. Re: AO-51 Schedule

Newsgroup: rec.radio.amateur.space
Date: 2005-03-29 13:28:37 UTC
From: William Erhardt <erhardt@mt.net>
Message-ID: <t7adnUFQd6qWxdTfRVn-jg@mt.net>
Source record: 2075

Howdy PJ,

Look at AMSAT page:

http://www.amsat.org

go to AO-51 page and each mode is explained.

Cheers Bill K7MT AMSAT 33461

212. Re: AO-51 Schedule

Newsgroup: rec.radio.amateur.space
Date: 2005-03-30 03:57:26 UTC
From: ozzy_battler@hotmail.com
Message-ID: <5ddf0e3c.0503291957.4ee3026a@posting.google.com>
Source record: 2076

TY Bill,will do...Cheers.. pj

"William Erhardt" <erhardt@mt.net> wrote in message
news:<t7adnUFQd6qWxdTfRVn-jg@mt.net>...
> Howdy PJ,
>
> Look at AMSAT page:
>
> http://www.amsat.org
>
> go to AO-51 page and each mode is explained.
>
> Cheers Bill K7MT AMSAT 33461

213. Last rites declaration of Ioannes Paulus PP. II (Karol Wojtyla)

Newsgroup: rec.radio.amateur.space
Date: 2005-04-04 01:38:51 UTC
From: "Ioannes Paulus PP. II" <john_paul_ii@vatican.va>
Message-ID: <f1076e48.213c0bcc@news.vatican.va>
Source record: 2077
Cross-posted to: rec.sports.baseball,rec.sport.skating.inline,rec.radio.amateur.space

"The unforgiveable sins this earth must confront and overcome are Nationalism, capitalism, and hoarding. The idea of every nation should be forgot, price should be struck from the commons, and princes should be seen for the devils they are. The sins include our church, secret societies, and other religions which make of the spirit of God a divide."

Last rites declaration of Ioannes Paulus PP. II (Karol Wojtyla)
2nd April 2005

214. Last rites declaration of Ioannes Paulus PP. II (Karol Wojtyla)

Newsgroup: rec.radio.amateur.space
Date: 2005-04-04 12:49:45 UTC
From: "Ioannes Paulus PP. II" <john_paul_ii@vatican.va>
Message-ID: <64db4aa6.f1fcc197@news.vatican.va>
Source record: 2078
Cross-posted to: fido7.ru.phreaks,rec.radio.amateur.space,comp.unix.bsd.bsdi.announce,alt.fr.test.test.test.test

"The unforgiveable sins this earth must confront and overcome are
Nationalism, capitalism, and hoarding. The idea of every nation
should be forgot, price should be struck from the commons, and
princes should be seen for the devils they are. The sins include
our church, secret societies, and other religions which make of
the spirit of God a divide."

Last rites declaration of Ioannes Paulus PP. II (Karol Wojtyla)
2nd April 2005

--
truly godly, and most of them lately become
so. There are very few houses in the whole town, into which salvation
has not lately come, in one or more instances. There are several
Negroes, who from what was seen in them then, and what is discernible in
them since, appear to have been truly born again in the late remarkable
season.

God has also seemed to have gone out of His usual way, in the quickness
of His work, and the swift progress His Spirit has made in His
operations on the hearts of many. It is wonderful that persons should be
so suddenly and yet so greatly changed. Many have been taken from a
loose and careless way of living, and seized with strong convictions of
their guilt and misery, and in a very little time old things have passed
away, and all things have become new with them.

God's work has also appeared very extraordinary in the degrees of His
influences; in the degrees both of awakening and conviction, and also of
saving light, love, and joy, that many have experienced. It has also
been very extraordinary in the extent of it, and its being so swiftly
propagated from town to town. In former times of the pouring out of the
Spirit of God on this town, though in some of them it was very
remarkable, it reached no further then; the neighboring towns all around
continued unmoved.

This work seemed to be at its greatest height in this town in the former
part of the spring, in March and April. At that time God's work in the
conversion of souls was carried on amongst us in so wonderful a manner,
that, so far as I can judge, it appears to have been at the rate at
least of four persons in a day; or near thirty in a week, take one with
another, for five or six weeks together. When God in so remarkable a
manner took the work into His own hands, there was as much done in a day
or two, as at ordinary times, with all endeavors that men can use, and
with such a blessing as we commonly have, is done in a year.

I am very sensible, how apt m

215. Re: Did I hear RS-15 beacon?

Newsgroup: rec.radio.amateur.space
Date: 2005-04-06 23:12:12 UTC
From: Hils <hils@nospam.demon.co.uk>
Message-ID: <bwzqgLAMzGVCFwb6@newearth.demon.co.uk>
Source record: 2079

Matt J. McCullar <mccullar@flash.net> wrote

>I checked out www.heavens-above.com and it said one of the ham sats passing
>overhead tonight was RS-15. I'm very, very new to listening to satellites
>and I'm not always sure what I'm hearing. I have heard packet from the
>International Space Station, though.
>
>The web site said RS-15 would pass overhead tonight at a pretty high
>elevation, which I think gives a better chance for reception, since it's
>quite far from the ground/horizon. It said that the RS-15 beacon is on
>29.352 USB. I have a Yaesu FT-757 ham rig that I use primarily for
>listening, and a 15-meter indoor dipole strung up along the ceiling.
>
>While listening to just noise on the frequency for a little while, waiting
>for the bird to show up, I gradually began to hear a series of long tones.
>Without an accurate stopwatch, I think each tone is about 1.5 seconds in
>duration, about 3 seconds apart. Seems like a beacon, but no callsign
>associated with it. Should there be?
>
>The pitch of the tone seemed to gradually go lower, and I was able to
>slightly retune the receiver to get it "back" to the original pitch. I
>think that's a satellite Doppler shift, am I right?
>
>Thanks for any advice.

From my (very sporadic) listening log:

"2005-03-02 1523 29352kHz... single repeated tone ~3s long with chirp
and doppler shift"

At the time I attributed it to RS-15, and still do. Happy listening!

--
Hil

216. Radio Meteor Obs. Bull. March 2005

Newsgroup: rec.radio.amateur.space
Date: 2005-04-09 15:08:43 UTC
From: Chris Steyaert <observations@rmob.org>
Message-ID: <surf51h5mln15ctskhmrkciefthmri6f1k@4ax.com>
Source record: 2080
Cross-posted to: rec.radio.amateur.space,sci.astro.amateur

Radio Meteor Observation Bulletin No. 140 of March 2005 (61 K) is available now as

http://visualrmob.free.fr/rmobtext/rmob0503.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

http://radio.data.free.fr

Chris

217. What's this @ 12.9 Mhz ?

Newsgroup: rec.radio.amateur.space
Date: 2005-04-19 23:21:39 UTC
From: "news.free-online.net" <barneSPAMSTOPy_holmes@yahoo.co.uk>
Message-ID: <42659283$0$94531$ed2619ec@ptn-nntp-reader01.plus.net>
Source record: 2081

What's the source of this sound ?

http://www.humanity.free-online.co.uk/strange-radio-sound-sw-12point9-mhz.mp
3

sounds like:

http://www-pw.physics.uiowa.edu/space-audio/vgr-helio.html

but is it ? And that was received by Voyager, can it be received
on earth ?

Any confirmation appreciated :-)

barney

218. Re: What's this @ 12.9 Mhz ?

Newsgroup: rec.radio.amateur.space
Date: 2005-04-20 03:08:34 UTC
From: xxx@xxx.xx
Message-ID: <4265c742.190210218@152.91.10.200>
Source record: 2082

On Wed, 20 Apr 2005 00:21:39 +0100, "news.free-online.net"
<barneSPAMSTOPy_holmes@yahoo.co.uk> etched in cyberspace:

>What's the source of this sound ?
>
>http://www.humanity.free-online.co.uk/strange-radio-sound-sw-12point9-mhz.mp
>3
>
>sounds like:
>
>http://www-pw.physics.uiowa.edu/space-audio/vgr-helio.html
>
>but is it ? And that was received by Voyager, can it be received
>on earth ?
>
>Any confirmation appreciated :-)
>
>barney
>
>
This sound is a digital signal modulated on a multicarrier phase shift
keying.
Nothing supernatural or ET about it.
Near the stat you can hear a carrier being swept accross.
X X
X
X X

219. HT's for LEO use

Newsgroup: rec.radio.amateur.space
Date: 2005-04-20 12:24:37 UTC
From: James - KG4PBI <JAHarrison@Surry.net>
Message-ID: <d45vo3$72al$1@news3.infoave.net>
Source record: 2083

Hi,

I had an FT-817 that I had used for LEO use, awhile back, but due to its size, and lack of use I sold it off.

I am now looking for an HT to carry with me to use with an Arrow beam. Some of the ones I have focused on would be the Yaesu VX-5 or VX-7, and in the Kenwood TH-D7 or the TH-F6.

Does anyone have some experiance with any of these, and what may be the better choice.

thanks James KG4PBI

220. FM satelite operations

Newsgroup: rec.radio.amateur.space
Date: 2005-04-20 16:47:17 UTC
From: Buck <iam@this.site>
Message-ID: <og1d611m5pad4n9fahqvmhmj7kkl0nb3ei@4ax.com>
Source record: 2084

When I bought my FT-817 last year, the manual described a setup of five channels that allowed operation through one of the OSCAR satellites. There was an input and output based on the satellite's movement and doppler effect and a user could follow the satellite by changing the channel as it passed overhead. I was informed that the satellite described was dead so I never used it.

I now have a dual-band HT and would like to know if there are any satellites that can be programmed into it in a similar manner.

Thank you,

Buck
--
For what it's worth.

221. Re: What's this @ 12.9 Mhz ?

Newsgroup: rec.radio.amateur.space
Date: 2005-04-20 17:02:45 UTC
From: "news.free-online.net" <usenet_holmes@yahoo.co.uk>
Message-ID: <42668b32$0$42306$ed2619ec@ptn-nntp-reader02.plus.net>
Source record: 2085

"Octa Ex" <xxx@xxx.xx> wrote in message
news:4265c742.190210218@152.91.10.200...
> On Wed, 20 Apr 2005 00:21:39 +0100, "news.free-online.net"
> <barneSPAMSTOPy_holmes@yahoo.co.uk> etched in cyberspace:
>
> >What's the source of this sound ?
> >
>
>http://www.humanity.free-online.co.uk/strange-radio-sound-sw-12point9-mhz.m
p
> >3
> >
> >sounds like:
> >
> >http://www-pw.physics.uiowa.edu/space-audio/vgr-helio.html
> >
> >but is it ? And that was received by Voyager, can it be received
> >on earth ?
> >
> >Any confirmation appreciated :-)
> >
> >barney
> >
> >
> This sound is a digital signal modulated on a multicarrier phase shift
> keying.

Thankyou Octa Ex ! :-)

How do you know this ?

Why does it appear in various places on the Spectrum ?

What do you think to this analysis ? :

http://communities.anomalies.net/cgi-bin/bbs/ultimatebb.cgi?ubb=get_topic;f=
25;t=007424

> Nothing supernatural or ET about it.

I did'nt say that !

But if it is 'earthbound' then why does the Voyager signal sound
similiar ?

> Near the stat you can hear a carrier being swept accross.

Wow. I thought that was natural 'drift'.

> X X
> X
> X X

barney

222. Re: What's this @ 12.9 Mhz ?

Newsgroup: rec.radio.amateur.space
Date: 2005-04-20 19:23:52 UTC
From: "P.Poelstra" <adsl642564@tiscali.nl>
Message-ID: <4266ac48$0$44071$5fc3050@dreader2.news.tiscali.nl>
Source record: 2086

Hi Barney and the group.

This is a transmission from a STANAG 4285 transmitter used by NATO
countries,it can be heard all over the spectrum.
Further information and sound samples can be found here:
http://rover.wiesbaden.netsurf.de/~signals/WAV/STANAG4285_BRASS.HTML
http://www.milspec.ca/modems/modems.html

> What's the source of this sound ?
>
http://www.humanity.free-online.co.uk/strange-radio-sound-sw-12point9-mhz.mp
3
> Any confirmation appreciated :-)
>
> barney

223. Re: FM satelite operations

Newsgroup: rec.radio.amateur.space
Date: 2005-04-20 20:38:30 UTC
From: Brad <bradvk2qq@w6ir.com>
Message-ID: <4266bdce$0$79452$14726298@news.sunsite.dk>
Source record: 2087

"Buck" <iam@this.site> wrote in message
news:og1d611m5pad4n9fahqvmhmj7kkl0nb3ei@4ax.com...
> When I bought my FT-817 last year, the manual described a setup of
> five channels that allowed operation through one of the OSCAR
> satellites. There was an input and output based on the satellite's
> movement and doppler effect and a user could follow the satellite by
> changing the channel as it passed overhead. I was informed that the
> satellite described was dead so I never used it.
>
> I now have a dual-band HT and would like to know if there are any
> satellites that can be programmed into it in a similar manner.
>
> Thank you,
>
>
> Buck
> --
> For what it's worth.

AO51 is your bird.

Brad VK2QQ

224. Re: HT's for LEO use

Newsgroup: rec.radio.amateur.space
Date: 2005-04-20 22:31:36 UTC
From: Terl <wn6bdb@hotmail.com>
Message-ID: <1114036296.629259.114920@z14g2000cwz.googlegroups.com>
Source record: 2088

Since the VX-5 and VX-7 are both incapable of full duplex they should be off the list. Half duplex operation on the LEO satellites is a source of major QRM and (IMHO) shouldn't be allowed.
I have a TH-D7 and an arrow antenna with diplexer that I've used many times on SO-50, AO-51, and AO-27. Since this HT also supports APRS operation, it's ideal hiking and biking.
I recommend a VOX head set for hands free operation (keeping the antenna aimed at the satellite and downlink VFO on frequency pretty much uses up all your free hands).
Steve

225. 3Ghz Discone versus satellite dish

Newsgroup: rec.radio.amateur.space
Date: 2005-04-21 17:48:06 UTC
From: Sanchez <sanchez_mobile@telenet.be>
Message-ID: <0MR9e.127772$Mo4.42028@blueberry.telenet-ops.be>
Source record: 2089

I have some questions about the reception of polar HRPT (1600Mhz). The AOR discone antennas DA-5000 and DA-753G can they be used to receive these signals? And would it also be possible to receive the GEO-sats (with a suitable receiver)?
The big advantage for me is that you don't have to follow the satellite's orbit. Or is there a big difference in the reception quality? I've found a lot of info on the net, but what's possible on one site, isn't possible according to another one.

I'm currently receiving APT images with a Diamond discone and an PCR-1000, I'm pleased with the results (after a lot of minor software adjustments) but I'm thinking of upgrading my equipment.......all suggestions welcome.

Thank you.

226. Re: 3Ghz Discone versus satellite dish

Newsgroup: rec.radio.amateur.space
Date: 2005-04-22 10:06:01 UTC
From: Pat Cox <peacox@gloryroad.net>
Message-ID: <4268CC89.84814D13@gloryroad.net>
Source record: 2090

I would be interested in what software you might be using for the PCR-1000.
Anyone with experience using Bonito 5.2 (also called RadioCom 5)? I have a
factory fresh copy ($241) along with a new PCR-1000 both still in their boxes
and just wondering if it is worth my time setting it up or just disposing of it.
pcox

Sanchez wrote:

> I have some questions about the reception of polar HRPT (1600Mhz). The AOR
> discone antennas DA-5000 and DA-753G can they be used to receive these
> signals? And would it also be possible to receive the GEO-sats (with a
> suitable receiver)?
> The big advantage for me is that you don't have to follow the satellite's
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>
> I'm currently receiving APT images with a Diamond discone and an PCR-1000,
> I'm pleased with the results (after a lot of minor software adjustments) but
> I'm thinking of upgrading my equipment.......all suggestions welcome.
>
> Thank you.

227. Re: 3Ghz Discone versus satellite dish

Newsgroup: rec.radio.amateur.space
Date: 2005-04-22 10:39:32 UTC
From: Sanchez <sanchez_mobile@telenet.be>
Message-ID: <lv4ae.130992$Mo4.121068@blueberry.telenet-ops.be>
Source record: 2091

I'm using a Diamond discone D-130 antenna (with max 10meter quality cable, such as
aircell) but an antenna more specific for APT reception would be much better.

With the program Orbitron (to predict satellite passes, with DDE option) and WXsat to decode the signals. I'm experimenting with WXtoIMG but I find this more difficult to setup. You can also fine-tune the pcr with factory software (EX-2099), but it can wreck your receiver......make sure that you've got a backup copy of your EEPROM before experimenting (unique settings for each receiver). It takes a signal generator, millivoltmeter and oscilloscope to fine-tune the pcr.

Pcr control with icom software, but I've read that Bonito is better because it has an built-in DSP filter.
I didn't test the bonito because I'm not spending that amount on software, I'd rather invest it in equipment.
So in your case I think it's worth the installation. You could also try the free pcrtalk program.

I'm not using an amplifier because it increases weak signals, but it also increases the
noise in strong signals. Noaa signals are strong enough to recieve them without one.
The optional DSP unit for the pcr only has advantage in the lower frequencies.

After a lot of patience, testing and adjusting my results are very good, sometimes I've got a very good signal, starting at a 10 degree angle.

"Pat Cox" <peacox@gloryroad.net> wrote in message
news:4268CC89.84814D13@gloryroad.net...
>I would be interested in what software you might be using for the PCR-1000.
> Anyone with experience using Bonito 5.2 (also called RadioCom 5)? I have a
> factory fresh copy ($241) along with a new PCR-1000 both still in their
> boxes
> and just wondering if it is worth my time setting it up or just disposing
> of it.
> pcox
>
> Sanchez wrote:
>
>> I have some questions about the reception of polar HRPT (1600Mhz). The
>> AOR
>> discone antennas DA-5000 and DA-753G can they be used to receive these
>> signals? And would it also be possible to receive the GEO-sats (with a

>> suitable receiver)?
>> The big advantage for me is that you don't have to follow the satellite's
>> orbit. Or is there a big difference in the reception quality? I've found
>> a
>> lot of info on the net, but what's possible on one site, isn't possible
>> according to another one.
>>
>> I'm currently receiving APT images with a Diamond discone and an
>> PCR-1000,
>> I'm pleased with the results (after a lot of minor software adjustments)
>> but
>> I'm thinking of upgrading my equipment.......all suggestions welcome.
>>
>> Thank you.
>

228. Re: FM satelite operations

Newsgroup: rec.radio.amateur.space
Date: 2005-04-22 12:50:17 UTC
From: William Erhardt <erhardt@mt.net>
Message-ID: <HP6dnUaeddeRbvXfRVn-vw@mt.net>
Source record: 2092

Howdy Buck,

Bill K7MT in Helena, Mt. Look at

http://www.amsat.org

Satellite status and look at SO-50 and AO-51 the two operational FM birds.
FO-29 is the best SSB satellite at this time. Enjoy.

Bill K7MT AMSAT 33461

229. Re: HT's for LEO use

Newsgroup: rec.radio.amateur.space
Date: 2005-04-22 17:37:59 UTC
From: rocketeer <rocketeer@hotmail.com>
Message-ID: <duudnViKS6Llq_TfRVn-2A@comcast.com>
Source record: 2093

Terl wrote:
> Since the VX-5 and VX-7 are both incapable of full duplex they should
> be off the list. Half duplex operation on the LEO satellites is a
> source of major QRM and (IMHO) shouldn't be allowed.
> I have a TH-D7 and an arrow antenna with diplexer that I've used many
> times on SO-50, AO-51, and AO-27. Since this HT also supports APRS
> operation, it's ideal hiking and biking.
> I recommend a VOX head set for hands free operation (keeping the
> antenna aimed at the satellite and downlink VFO on frequency pretty
> much uses up all your free hands).
> Steve
>
Agree on the TH-D7 HT, it can also send APRS to the ISS digipeater and
possibly the PCSAT2 that will go up on the Shuttle Discovery and
installed on one of the solar "arms" of ISS.
See: http://www.ew.usna.edu/~bruninga/pcsat2.html

rocketeer

230. Re: What's this @ 12.9 Mhz ?

Newsgroup: rec.radio.amateur.space
Date: 2005-04-24 23:00:21 UTC
From: djbarney <usenet_holmes@yahoo.co.uk>
Message-ID: <9yVae.5959$YF5.1980@newsfe5-win.ntli.net>
Source record: 2094

Thanks Poelstra !

I'll check it out...:-)

barney

"P.Poelstra" <adsl642564@tiscali.nl> wrote in message
news:4266ac48$0$44071$5fc3050@dreader2.news.tiscali.nl...
> Hi Barney and the group.
>
> This is a transmission from a STANAG 4285 transmitter used by NATO
> countries,it can be heard all over the spectrum.
> Further information and sound samples can be found here:
> http://rover.wiesbaden.netsurf.de/~signals/WAV/STANAG4285_BRASS.HTML
> http://www.milspec.ca/modems/modems.html
>
>
>
>
>
>
>
> > What's the source of this sound ?
> >
>
http://www.humanity.free-online.co.uk/strange-radio-sound-sw-12point9-mhz.mp
> 3
> > Any confirmation appreciated :-)
> >
> > barney
>
>

231. Re: Setting Time Zone in Instant Track / Help again !

Newsgroup: rec.radio.amateur.space
Date: 2005-04-26 20:17:01 UTC
From: Les Thompson <Les@holywell.demon.co.uk>
Message-ID: <LWRNBFD9GqbCFwKd@holywell.demon.co.uk>
Source record: 2095

In message <h9GdnSmzkJXR7r_fRVn-qQ@comcast.com>, James
<jnipperxxx@nospamfdn.com> writes
>
>I posted this question and got a prompt reply, and yet I cannot get it to
>work.
>
>I find the autoexec.bat file on my pc. I right click the file, and
>select Edit.
>
>A window opens in Notepad. There are some minor entries there, so I first
>hit the return key, and then I type the exact words:
>
> set tz=est5edt
>
>I then select Edit (in the notepad window), and then Save.
>
>I reboot. But, the time zone change does not take effect in Instant
>Track.
>
>I have tried this 4 times, but no luck. Somehow, I am making a mistake in
>the edit process I am sure.
>
>Can anyone tell me where I am making a mistake please ? (I am using
>Windows XP)
>
>
>73 de Jim K4PYT
>

Jim, these were the replies you got last time.

From George KA3HSW
>
It did not work because XP does not use the autoexec.bat file at
startup....
you need to right-click your "My Computer" icon, choose the Advanced
tab,
then click the Environment Variables button. In the lower half of the
window, below the System Variables box, click the New button, and then
type
in "set" (no quotes) for the variable name, and "tz=EST5EDT" (again, no
quotes) for the variable value, and click OK to save.
>

I believe you tried this and still had problems.

George then sent this.
>
Strange..... well, a guaranteed way to get IT into the right time zone
is
to go into the IT.INI file and make sure that the PST line is commented
out,
and (for you) the EST line is uncommented. I can't recall whether this
method overrides the environment variable or vice versa, but I just
checked
on my system and I have both the environment variable and the .INI file
set
correctly for my TZ (CST) and IT works fine.
>

I also responded with the following which worked for me.
>
I had to dig out my old copy of IT to try this and found that the file
you need to put the SET command in is in the windows directory:
C:\Windows\system32\autoexec.nt
Open autoexec.nt with notepad to edit, works fine for me in the uk with
a setting of GMT0. I haven't used IT for years my copy is dated 1989
but still works well in XP.
>

HTH

--
Les

232. Re: Setting Time Zone in Instant Track / Help again !

Newsgroup: rec.radio.amateur.space
Date: 2005-04-26 23:53:52 UTC
From: James <jnipperxxx@nospamfdn.com>
Message-ID: <yeOdnTqYicgMSfPfRVn-uQ@comcast.com>
Source record: 2096

Les, it worked !!!!!!!! I just got your message, and did the change (I am not that pc skilled), and it works great the first time !!

I had pretty well given up, and had not used Instantrack since I posted my question.

Thank you very much !!!!

73 de Jim K4PYT

233. Re: Setting Time Zone in Instant Track / Help again !

Newsgroup: rec.radio.amateur.space
Date: 2005-04-27 09:05:07 UTC
From: Les Thompson <Les@holywell.demon.co.uk>
Message-ID: <fpe4+SDDX1bCFwb4@holywell.demon.co.uk>
Source record: 2097

In message <yeOdnTqYicgMSfPfRVn-uQ@comcast.com>, James
<jnipperxxx@nospamfdn.com> writes
>Les, it worked !!!!!!!! I just got your message, and did the change (I
>am not that pc skilled), and it works great the first time !!
>
>
>I had pretty well given up, and had not used Instantrack since I posted my
>question.
>
>Thank you very much !!!!
>
>73 de Jim K4PYT
>
>
Glad to be of help Jim.
--
Les G3VYZ

234. WTB Kansas City Tracker card

Newsgroup: rec.radio.amateur.space
Date: 2005-04-28 19:29:21 UTC
From: Dennis Kaylor <k4oxg@tampabay.rr.com>
Message-ID: <lQace.17268$716.6211@tornado.tampabay.rr.com>
Source record: 2098

hello all
i am in need of a Complete Kansas City Tracker card
must have all cables and software that came with it and must be in good
working condition
let me know what you have to offer
thanks

235. Re: HT's for LEO use

Newsgroup: rec.radio.amateur.space
Date: 2005-04-30 13:33:02 UTC
From: Pablo Enchilada <pe@taco.com>
Message-ID: <MOLce.18236$V02.11990@fe08.lga>
Source record: 2099

I agree, the TH-D7a is probably the best radio all around for sat ops. The
only other one that you might consider is the Icom W32a

"rocketeer" <rocketeer@hotmail.com> wrote in message
news:duudnViKS6Llq_TfRVn-2A@comcast.com...
> Terl wrote:
>> Since the VX-5 and VX-7 are both incapable of full duplex they should
>> be off the list. Half duplex operation on the LEO satellites is a
>> source of major QRM and (IMHO) shouldn't be allowed.
>> I have a TH-D7 and an arrow antenna with diplexer that I've used many
>> times on SO-50, AO-51, and AO-27. Since this HT also supports APRS
>> operation, it's ideal hiking and biking.
>> I recommend a VOX head set for hands free operation (keeping the
>> antenna aimed at the satellite and downlink VFO on frequency pretty
>> much uses up all your free hands). Steve
>>
> Agree on the TH-D7 HT, it can also send APRS to the ISS digipeater and
> possibly the PCSAT2 that will go up on the Shuttle Discovery and installed
> on one of the solar "arms" of ISS.
> See: http://www.ew.usna.edu/~bruninga/pcsat2.html
>
> rocketeer

236. HAMSAT India

Newsgroup: rec.radio.amateur.space
Date: 2005-05-07 14:28:42 UTC
From: William Erhardt <erhardt@mt.net>
Message-ID: <il6dnRt2xYcGTeHfRVn-sA@mt.net>
Source record: 1950

Howdy from Bill K7MT

Information on the newest Amateur Satellite at:

http://www.amsatindia.com

Check out the great pictures and information on this great SSB/CW linear transponder Amateur Satellite.

Cheers Bill K7MT AMSAT 33461

237. Radio Meteor Obs. Bull. April 2005 Lyrids

Newsgroup: rec.radio.amateur.space
Date: 2005-05-07 20:45:52 UTC
From: Chris Steyaert <observations@rmob.org>
Message-ID: <47aq719jor3u9d5rhih71keefp66mbcno2@4ax.com>
Source record: 1951
Cross-posted to: rec.radio.amateur.space,sci.astro.amateur

Radio Meteor Observation Bulletin No. 141 of March 2005 (72 K) is available now as

http://visualrmob.free.fr/rmobtext/rmob0504.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

http://radio.data.free.fr

Chris

238. Re: HAMSAT India

Newsgroup: rec.radio.amateur.space
Date: 2005-05-07 23:42:18 UTC
From: Brad <bradvk2qq@w6ir.com>
Message-ID: <427d5266$0$79466$14726298@news.sunsite.dk>
Source record: 1952

"William Erhardt" <erhardt@mt.net> wrote in message
news:iI6dnRt2xYcGTeHfRVn-sA@mt.net...
> Howdy from Bill K7MT
>
> Information on the newest Amateur Satellite at:
>
> http://www.amsatindia.com
>
> Check out the great pictures and information on this great SSB/CW linear
> transponder Amateur Satellite.
>
> Cheers Bill K7MT AMSAT 33461
>

I've just read this message, dialed up 145.900 and there it was! Some luck involved there of course. ZL3MH working VK3KOS at 2332z 07/05/05. Signals were 52 on a Comet GP15 vertical. ZL3MH was running 10W.

I was unable to get through with an FT817 as I had no idea where to tune to counter the doppler and there were no replies to my calls on 435.250.

Great work VU guys. It sounded really good.

Brad VK2QQ

239. Re: HT's for LEO use

Newsgroup: rec.radio.amateur.space
Date: 2005-05-08 22:38:45 UTC
From: Ted <nospam@nospam.com>
Message-ID: <Vxwfe.9176$GQ5.8762@newsread1.news.pas.earthlink.net>
Source record: 1953

rocketeer wrote in message ...
>Terl wrote:
>> Since the VX-5 and VX-7 are both incapable of full duplex they should
>> be off the list. Half duplex operation on the LEO satellites is a
>> source of major QRM and (IMHO) shouldn't be allowed.
>> I have a TH-D7 and an arrow antenna with diplexer that I've used many
>> times on SO-50, AO-51, and AO-27. Since this HT also supports APRS
>> operation, it's ideal hiking and biking.
>> I recommend a VOX head set for hands free operation (keeping the
>> antenna aimed at the satellite and downlink VFO on frequency pretty
>> much uses up all your free hands).
>> Steve
>>
>Agree on the TH-D7 HT, it can also send APRS to the ISS digipeater and
>possibly the PCSAT2 that will go up on the Shuttle Discovery and
>installed on one of the solar "arms" of ISS.
>See: http://www.ew.usna.edu/~bruninga/pcsat2.html
>
>rocketeer

NASA calls it "MISSE PEC 5"

Do a google search on that name and you will find a bunch of interesting
stuff

here is one link

http://www.grc.nasa.gov/WWW/RT/2003/5000/5410wilt.html

240. Need schematic/manual SSB ELECTRONIC TLA1270-50

Newsgroup: rec.radio.amateur.space
Date: 2005-05-09 00:22:53 UTC
From: wb0gaz <wb0gaz@hotmail.com>
Message-ID: <1115598172.996024.273840@z14g2000cwz.googlegroups.com>
Source record: 1954
Cross-posted to: rec.radio.amateur.space,rec.radio.amateur.equipment

I'm posting this to r.r.a.s and here in the hopes someone might have
documentation on this 23cm power amp made by SSB ELECTRONIC in Germany.
If you have info on this amp or know of someone that might, pls e-mail
(or if you're in Germany and might be able to help with factory
contact, I'd be very grateful.)

Tks,

73 Dave WB0GAZ wb0gaz@hotmail.com

241. Re: Need schematic/manual SSB ELECTRONIC TLA1270-50

Newsgroup: rec.radio.amateur.space
Date: 2005-05-09 10:52:46 UTC
From: Dennis Kaylor <k4oxg@tampabay.rr.com>
Message-ID: <2iHfe.6911$w15.6812@tornado.tampabay.rr.com>
Source record: 1955
Cross-posted to: rec.radio.amateur.space,rec.radio.amateur.equipment

here is SSBs websites
they are pretty good at responding to emails
http://www.ssbusa.com/
http://www.ssb.de

wb0gaz wrote:
> I'm posting this to r.r.a.s and here in the hopes someone might have
> documentation on this 23cm power amp made by SSB ELECTRONIC in Germany.
> If you have info on this amp or know of someone that might, pls e-mail
> (or if you're in Germany and might be able to help with factory
> contact, I'd be very grateful.)
>
> Tks,
>
> 73 Dave WB0GAZ wb0gaz@hotmail.com
>

242. Alliance rotor question

Newsgroup: rec.radio.amateur.space
Date: 2005-05-10 17:17:10 UTC
From: goodsfuryou@yahoo.com
Message-ID: <1115745430.119931.144020@o13g2000cwo.googlegroups.com>
Source record: 1956

Hello,
Are the U100 rotors and U110 controllers compatible. Don't get any
action out of the setup after connecting (number to number) the two
pieces together using a four wire cable. At one position while clicking
around the cntrl. dial I do get a buzz/hum. Any info would be
appreciated!
Thanks much,
JC

243. kizik

Newsgroup: rec.radio.amateur.space
Date: 2005-05-10 17:24:09 UTC
From: brian borman <b88@earthlink.net>
Message-ID: <Z66ge.507$bm5.208@newsread3.news.atl.earthlink.net>
Source record: 1957

www.kizik1.com

244. labjack U12 and labjack piggy back rotor control for sale

Newsgroup: rec.radio.amateur.space
Date: 2005-05-12 18:24:01 UTC
From: Dennis Kaylor <k4oxg@tampabay.rr.com>
Message-ID: <5bNge.14955$w15.12734@tornado.tampabay.rr.com>
Source record: 1958

hello all
i have the above unit for sale
the Labjack U12 www.labjack.com and the labjack piggyback www.NLSA.com
this combo is to control your Yaesu G5400B G5500 and G5600 Az/El rotors
the labjack U12 sells new for 119$ the piggyback sells for $30
i will throw in the registration number for Nova for Windows Satellite
tracking software $59
i am asking $100 for it all
if interested please email direct
mailto://k4oxg@tampabay.rr.com
thanks

245. Satellite Doppler Tuning Article.

Newsgroup: rec.radio.amateur.space
Date: 2005-05-12 22:28:49 UTC
From: William Erhardt <erhardt@mt.net>
Message-ID: <4oWdnXe3We05RR7fRVn-uQ@mt.net>
Source record: 1959

Here is a nice artice about doppler tuning on the Amateur Satellites.

http://homepages.paradise.net.nz/lamontd/kb5mu.html

Bill K7MT AMSAT 33461

246. Here it is. The smoking gun.

Newsgroup: rec.radio.amateur.space
Date: 2005-05-13 12:24:49 UTC
From: Greg Palast <tour@gregpalast.com>
Message-ID: <993cebea.2ea24428@mail.gregpalast.com>
Source record: 1960

The memo that has "IMPEACH HIM" written all over it.

The top-level government memo marked "SECRET AND STRICTLY PERSONAL", dated eight months before Bush sent us into Iraq, following a closed meeting with the President, reads, "Military action was now seen as inevitable. Bush wanted to remove Saddam through military action justified by the conjunction of terrorism and WMD. But the intelligence and facts were being fixed around the policy."

Read that again: "The intelligence and facts were being fixed...."

For years, after each damning report on BBC TV, viewers inevitably ask me, "Isn't this grounds for impeachment?" -- vote rigging, a blind eye to terror and the bin Ladens before 9-11, and so on. Evil, stupidity and self-dealing are shameful but not impeachable. What's needed is a "high crime or misdemeanor."

And if this ain't it, nothing is.

The memo uncovered this week by the TIMES, goes on to describe an elaborate plan by George Bush and British Prime Minister Tony Blair to hoodwink the lanet into supporting an attack on Iraq knowing full well the evidence for war was a phony.

A conspiracy to commit serial fraud is, under federal law, racketeering. However, the Mob's schemes never cost so many lives. Here's more. "Bush had made up his mind to take military action. But the case was thin. Saddam was not threatening his neighbors, and his WMD capability was less than that of Libya, North Korea or Iran."

Really? But Mr. Bush told us, "Intelligence gathered by this and other governments leaves no doubt that the Iraq regime continues to possess and conceal some of the most lethal weapons ever devised."

A month ago, the Silberman-Robb Commission issued its report on WMD intelligence before the war, dismissing claims that Bush fixed the facts with this snooty, condescending conclusion written directly to the President, "After a thorough review, the Commission found no indication that the Intelligence Community distorted the evidence regarding Iraq's weapons." We now know the report was a bogus 618 pages of thick whitewash aimed to let Bush off the hook for his murderous mendacity. Read on: The invasion build-up was then set, says the memo, "beginning 30 days before the US Congressional elections." Mission accomplished. You should parse the entire memo -- reprinted below -- and see if you can make it through its three pages without losing your lunch. Now sharp readers may note they didn't see this memo, in fact, printed in the New York Times. It wasn't. Rather, it was splashed across the front pages of the

Times of LONDON on Monday.

It has effectively finished the last, sorry remnants of Tony Blair's political career. (While his Labor Party will most assuredly win the elections Thursday, Prime Minister Blair is expected, possibly within months, to be shoved overboard in favor of his Chancellor of the Exchequer, a political execution which requires only a vote of the Labour party's members in Parliament.)

But in the US, barely a word. The New York Times covers this hard evidence of Bush's fabrication of a casus belli as some "British" elections story. Apparently, our President's fraud isn't "news fit to print."

My colleagues in the UK press have skewered Blair, digging out more incriminating memos, challenging the official government factoids and fibs. But in the US press nada, bubkes, zilch. Bush fixed the facts and somehow that's a story for "over there."

The Republicans impeached Bill Clinton over his cigar and Monica's affections. And the US media could print nothing else. Now, we have the stone, cold evidence of bending intelligence to sell us on death by the thousands, and neither a Republican Congress nor what is laughably called US journalism thought it worth a second look.

My friend Daniel Ellsberg once said that what's good about the American people is that you have to lie to them. What's bad about Americans is that it's so easy to do.

Greg Palast, former columnist for Britain's
Guardian papers, is the author of the New York Times bestseller, "The Best Democracy Money Can Buy". Subscribe to his columns at GregPalast.COM.
Media requests to CONTACT(at)GregPalast.COM.
Permission to reprint with attribution granted.

[Here it is - the secret smoking gun memo
- discovered by the Times of London. - GP]

SECRET AND STRICTLY PERSONAL - UK EYES ONLY
DAVID MANNING

From: Matthew Rycroft

Date: 23 July 2002 S 195 /02

cc: Defence Secretary,Foreign Secretary, Attorney-General,
Sir Richard Wilson, John Scarlett, Francis Richards, CDS, C,
Jonathan Powell, Sally Morgan, Alastair Campbell

IRAQ: PRIME MINISTER'S MEETING, 23 JULY

Copy addressees and you met the Prime Minister on 23 July to discuss Iraq.

This record is extremely sensitive. No further copies should be made. It should be shown only to those with a genuine need to know its contents.

John Scarlett summarised the intelligence and latest JIC assessment. Saddam's regime was tough and based on extreme fear. The only way to overthrow it was likely to be by massive military action. Saddam was worried and expected an attack, probably by air and land, but he was not convinced that it would be immediate or overwhelming. His regime expected their neighbours to line up with the US. Saddam knew that regular army morale was poor. Real support for Saddam among the public was probably narrowly based.

C reported on his recent talks in Washington. There was a perceptible shift in attitude. Military action was now seen as inevitable. Bush wanted to remove Saddam, through military action, justified by the conjunction of terrorism and WMD. But the intelligence and facts were being fixed around the policy. The NSC had no patience with the UN route, and no enthusiasm for publishing material on the Iraqi regime's record. There was little discussion in Washington of the aftermath after military action.

CDS said that military planners would brief CENTCOM on 1-2 August, Rumsfeld on 3 August and Bush on 4 August.

The two broad US options were:

(a) Generated Start. A slow build-up of 250,000 US troops, a short (72 hour) air campaign, then a move up to Baghdad from the south. Lead time of 90 days (30 days preparation plus 60 days deployment to Kuwait).

(b) Running Start. Use forces already in theatre (3 x 6,000), continuous air campaign, initiated by an Iraqi casus belli. Total lead time of 60 days with the air campaign beginning even earlier. A hazardous option.

The US saw the UK (and Kuwait) as essential, with basing in Diego Garcia and Cyprus critical for either option. Turkey and other Gulf states were also important, but less vital. The three main options for UK involvement were:

(i) Basing in Diego Garcia and Cyprus, plus three SF squadrons.

(ii) As above, with maritime and air assets in addition.

(iii) As above, plus a land contribution of up to 40,000, perhaps with a discrete role in Northern Iraq entering from Turkey, tying down two Iraqi divisions.

The Defence Secretary said that the US had already begun "spikes of activity" to put pressure on the regime. No decisions had been taken, but he thought the most likely timing in US minds for military action to begin was January, with the timeline beginning 30 days before the US Congressional elections.

The Foreign Secretary said he would discuss this with Colin Powell this week. It seemed clear that Bush had made up his mind to take military action, even if the timing was not yet decided. But the case was thin. Saddam was not threatening his neighbours, and his WMD capability was less than that of Libya, North Korea or Iran. We should work up a plan

for an ultimatum to Saddam to allow back in the UN weapons inspectors. This would also help with the legal justification for the use of force.

The Attorney-General said that the desire for regime change was not a legal base for military action. There were three possible legal bases: self-defence, humanitarian intervention, or UNSC authorisation. The first and second could not be the base in this case. Relying on UNSCR 1205 of three years ago would be difficult. The situation might of course change.

The Prime Minister said that it would make a big difference politically and legally if Saddam refused to allow in the UN inspectors. Regime change and WMD were linked in the sense that it was the regime that was producing the WMD. There were different strategies for dealing with Libya and Iran. If the political context were right, people would support regime change. The two key issues were whether the military plan worked and whether we had the political strategy to give the military plan the space to work.

On the first, CDS said that we did not know yet if the US battleplan was workable. The military were continuing to ask lots of questions.

For instance, what were the consequences, if Saddam used WMD on day one, or if Baghdad did not collapse and urban warfighting began? You said that Saddam could also use his WMD on Kuwait. Or on Israel, added the Defence Secretary.

The Foreign Secretary thought the US would not go ahead with a military plan unless convinced that it was a winning strategy. On this, US and UK interests converged. But on the political strategy, there could be US/UK differences. Despite US resistance, we should explore discreetly the ultimatum. Saddam would continue to play hard-ball with the UN.

John Scarlett assessed that Saddam would allow the inspectors back in only when he thought the threat of military action was real.

The Defence Secretary said that if the Prime Minister wanted UK military involvement, he would need to decide this early. He cautioned that many in the US did not think it worth going down the ultimatum route. It would be important for the Prime Minister to set out the political context to Bush.

Conclusions:

(a) We should work on the assumption that the UK would take part in any military action. But we needed a fuller picture of US planning before we could take any firm decisions. CDS should tell the US military that we were considering a range of options.

(b) The Prime Minister would revert on the question of whether funds could be spent in preparation for this operation.

(c) CDS would send the Prime Minister full details of the proposed military campaign and possible UK contributions by the end of the week.

(d) The Foreign Secretary would send the Prime Minister the background on the UN inspectors, and discreetly work up the ultimatum to Saddam. He would also send the Prime Minister advice on the positions of countries in the region especially Turkey, and of the key EU member states.

(e) John Scarlett would send the Prime Minister a full intelligence update.

(f) We must not ignore the legal issues: the Attorney-General would consider legal advice with FCO/MOD legal advisers. (I have written separately to commissionthis follow-up work.)

MATTHEW RYCROFT
(Rycroft was a Downing Street foreign policy aide)

247. Re: Satellite Doppler Tuning Article.

Newsgroup: rec.radio.amateur.space
Date: 2005-05-13 14:54:41 UTC
From: Galen Watts <gwatts@nrao.edu>
Message-ID: <Rc3he.1133$8g.795@news01.roc.ny>
Source record: 1961

William Erhardt wrote:
> Here is a nice artice about doppler tuning on the Amateur Satellites.
>
>
> http://homepages.paradise.net.nz/lamontd/kb5mu.html
>
>
> Bill K7MT AMSAT 33461

There's currently a discussion of Doppler tuning going on on the AMSAT
-BB group,
http://www.amsat.org/amsat-new/tools/maillist/maillist.php

-Galen, W8LNA

248. Here it is. The smoking gun.

Newsgroup: rec.radio.amateur.space
Date: 2005-05-13 21:03:07 UTC
From: Greg Palast <tour@gregpalast.com>
Message-ID: <690fea7e.5f9d45ad@mail.gregpalast.com>
Source record: 1962

The memo that has "IMPEACH HIM" written all over it.

The top-level government memo marked "SECRET AND STRICTLY PERSONAL", dated eight months before Bush sent us into Iraq, following a closed meeting with the President, reads, "Military action was now seen as inevitable. Bush wanted to remove Saddam through military action justified by the conjunction of terrorism and WMD. But the intelligence and facts were being fixed around the policy."

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From: Matthew Rycroft

Date: 23 July 2002 S 195 /02

cc: Defence Secretary,Foreign Secretary, Attorney-General,
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Newsgroup: rec.radio.amateur.space
Date: 2005-05-14 02:51:37 UTC
From: Greg Palast <tour@gregpalast.com>
Message-ID: <2bafb7e8.dcd00300@mail.gregpalast.com>
Source record: 1963

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Date: 2005-05-15 01:08:44 UTC
From: Greg Palast <tour@gregpalast.com>
Message-ID: <a1830659.db8eb4f1@mail.gregpalast.com>
Source record: 1964

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Date: 2005-05-19 01:23:30 UTC
From: Catherine@gregpalast.com
Message-ID: <7230a81a.c995144d@mail.gregpalast.com>
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SECRET AND STRICTLY PERSONAL - UK EYES ONLY
DAVID MANNING

From: Matthew Rycroft

Date: 23 July 2002 S 195 /02

cc: Defence Secretary,Foreign Secretary, Attorney-General,
Sir Richard Wilson, John Scarlett, Francis Richards, CDS, C,
Jonathan Powell, Sally Morgan, Alastair Campbell

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C reported on his recent talks in Washington. There was a perceptible shift in attitude. Military action was now seen as inevitable. Bush wanted to remove Saddam, through military action, justified by the conjunction of terrorism and WMD. But the intelligence and facts were being fixed around the policy. The NSC had no patience with the UN route, and no enthusiasm for publishing material on the Iraqi regime's record. There was little discussion in Washington of the aftermath after military action.

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The Attorney-General said that the desire for regime change was not a legal base for military action. There were three possible legal bases: self-defence, humanitarian intervention, or UNSC authorisation. The first and second could not be the base in this case. Relying on UNSCR 1205 of three years ago would be difficult. The situation might of course change.

The Prime Minister said that it would make a big difference politically and legally if Saddam refused to allow in the UN inspectors. Regime change and WMD were linked in the sense that it was the regime that was producing the WMD. There were different strategies for dealing with Libya and Iran. If the political context were right, people would support regime change. The two key issues were whether the military plan worked and whether we had the political strategy to give the military plan the space to work.

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Newsgroup: rec.radio.amateur.space
Date: 2005-05-19 03:05:24 UTC
From: Wayne@gregpalast.com
Message-ID: <285064d7.db78e1d1@mail.gregpalast.com>
Source record: 1967

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253. Is TAPR organized any events at Dayton '05

Newsgroup: rec.radio.amateur.space
Date: 2005-05-19 03:07:14 UTC
From: Don <don@donprice.com>
Message-ID: <1116472034.569078.10470@f14g2000cwb.googlegroups.com>
Source record: 1966

Are their any activities planned for TAPR this year at Dayton. I will obviously stop by the booth if they have one but if anyone knows of plan in advance will help plan schedules.

Don
KB5VP

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Newsgroup: rec.radio.amateur.space
Date: 2005-05-19 03:54:37 UTC
From: Tommy@gregpalast.com
Message-ID: <1e1ec07d.54e1c8fc@mail.gregpalast.com>
Source record: 1968

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DAVID MANNING

From: Matthew Rycroft

Date: 23 July 2002 S 195 /02

cc: Defence Secretary,Foreign Secretary, Attorney-General,
Sir Richard Wilson, John Scarlett, Francis Richards, CDS, C,
Jonathan Powell, Sally Morgan, Alastair Campbell

IRAQ: PRIME MINISTER'S MEETING, 23 JULY

Copy addressees and you met the Prime Minister on 23 July to discuss Iraq.

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C reported on his recent talks in Washington. There was a perceptible shift in attitude. Military action was now seen as inevitable. Bush wanted to remove Saddam, through military action, justified by the conjunction of terrorism and WMD. But the intelligence and facts were being fixed around the policy. The NSC had no patience with the UN route, and no enthusiasm for publishing material on the Iraqi regime's record. There was little discussion in Washington of the aftermath after military action.

CDS said that military planners would brief CENTCOM on 1-2 August, Rumsfeld on 3 August and Bush on 4 August.

The two broad US options were:

(a) Generated Start. A slow build-up of 250,000 US troops, a short (72 hour) air campaign, then a move up to Baghdad from the south. Lead time of 90 days (30 days preparation plus 60 days deployment to Kuwait).

(b) Running Start. Use forces already in theatre (3 x 6,000), continuous air campaign, initiated by an Iraqi casus belli. Total lead time of 60 days with the air campaign beginning even earlier. A hazardous option.

The US saw the UK (and Kuwait) as essential, with basing in Diego Garcia and Cyprus critical for either option. Turkey and other Gulf states were also important, but less vital. The three main options for UK involvement were:

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(ii) As above, with maritime and air assets in addition.

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The Defence Secretary said that the US had already begun "spikes of activity" to put pressure on the regime. No decisions had been taken, but he thought the most likely timing in US minds for military action to begin was January, with the timeline beginning 30 days before the US Congressional elections.

The Foreign Secretary said he would discuss this with Colin Powell this week. It seemed clear that Bush had made up his mind to take military action, even if the timing was not yet decided. But the case was thin. Saddam was not threatening his neighbours, and his WMD capability was less than that of Libya, North Korea or Iran. We should work up a plan

for an ultimatum to Saddam to allow back in the UN weapons inspectors. This would also help with the legal justification for the use of force.

The Attorney-General said that the desire for regime change was not a legal base for military action. There were three possible legal bases: self-defence, humanitarian intervention, or UNSC authorisation. The first and second could not be the base in this case. Relying on UNSCR 1205 of three years ago would be difficult. The situation might of course change.

The Prime Minister said that it would make a big difference politically and legally if Saddam refused to allow in the UN inspectors. Regime change and WMD were linked in the sense that it was the regime that was producing the WMD. There were different strategies for dealing with Libya and Iran. If the political context were right, people would support regime change. The two key issues were whether the military plan worked and whether we had the political strategy to give the military plan the space to work.

On the first, CDS said that we did not know yet if the US battleplan was workable. The military were continuing to ask lots of questions.

For instance, what were the consequences, if Saddam used WMD on day one, or if Baghdad did not collapse and urban warfighting began? You said that Saddam could also use his WMD on Kuwait. Or on Israel, added the Defence Secretary.

The Foreign Secretary thought the US would not go ahead with a military plan unless convinced that it was a winning strategy. On this, US and UK interests converged. But on the political strategy, there could be US/UK differences. Despite US resistance, we should explore discreetly the ultimatum. Saddam would continue to play hard-ball with the UN.

John Scarlett assessed that Saddam would allow the inspectors back in only when he thought the threat of military action was real.

The Defence Secretary said that if the Prime Minister wanted UK military involvement, he would need to decide this early. He cautioned that many in the US did not think it worth going down the ultimatum route. It would be important for the Prime Minister to set out the political context to Bush.

Conclusions:

(a) We should work on the assumption that the UK would take part in any military action. But we needed a fuller picture of US planning before we could take any firm decisions. CDS should tell the US military that we were considering a range of options.

(b) The Prime Minister would revert on the question of whether funds could be spent in preparation for this operation.

(c) CDS would send the Prime Minister full details of the proposed military campaign and possible UK contributions by the end of the week.

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MATTHEW RYCROFT
(Rycroft was a Downing Street foreign policy aide)

256. Here is the smoking gun

Newsgroup: rec.radio.amateur.space
Date: 2005-05-19 10:27:12 UTC
From: Gary@gregpalast.com
Message-ID: <3fd04fb6.1d6b9e7c@mail.gregpalast.com>
Source record: 1970

The memo that has "IMPEACH HIM" written all over it.

The top-level government memo marked "SECRET AND STRICTLY PERSONAL", dated eight months before Bush sent us into Iraq, following a closed meeting with the President, reads, "Military action was now seen as inevitable. Bush wanted to remove Saddam through military action justified by the conjunction of terrorism and WMD. But the intelligence and facts were being fixed around the policy."

Read that again: "The intelligence and facts were being fixed...."

For years, after each damning report on BBC TV, viewers inevitably ask me, "Isn't this grounds for impeachment?" -- vote rigging, a blind eye to terror and the bin Ladens before 9-11, and so on. Evil, stupidity and self-dealing are shameful but not impeachable. What's needed is a "high crime or misdemeanor."

And if this ain't it, nothing is.

The memo uncovered this week by the TIMES, goes on to describe an elaborate plan by George Bush and British Prime Minister Tony Blair to hoodwink the lanet into supporting an attack on Iraq knowing full well the evidence for war was a phony.

A conspiracy to commit serial fraud is, under federal law, racketeering. However, the Mob's schemes never cost so many lives. Here's more. "Bush had made up his mind to take military action. But the case was thin. Saddam was not threatening his neighbors, and his WMD capability was less than that of Libya, North Korea or Iran."

Really? But Mr. Bush told us, "Intelligence gathered by this and other governments leaves no doubt that the Iraq regime continues to possess and conceal some of the most lethal weapons ever devised."

A month ago, the Silberman-Robb Commission issued its report on WMD intelligence before the war, dismissing claims that Bush fixed the facts with this snooty, condescending conclusion written directly to the President, "After a thorough review, the Commission found no indication that the Intelligence Community distorted the evidence regarding Iraq's weapons." We now know the report was a bogus 618 pages of thick whitewash aimed to let Bush off the hook for his murderous mendacity. Read on: The invasion build-up was then set, says the memo, "beginning 30 days before the US Congressional elections." Mission accomplished. You should parse the entire memo -- reprinted below -- and see if you can make it through its three pages without losing your lunch. Now sharp readers may note they didn't see this memo, in fact, printed in the New York Times. It wasn't. Rather, it was splashed across the front pages of the

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My friend Daniel Ellsberg once said that what's good about the American people is that you have to lie to them. What's bad about Americans is that it's so easy to do.

Greg Palast, former columnist for Britain's
Guardian papers, is the author of the New York Times bestseller, "The Best Democracy Money Can Buy". Subscribe to his columns at GregPalast.COM.
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257. Re: Is TAPR organized any events at Dayton '05

Newsgroup: rec.radio.amateur.space
Date: 2005-05-19 14:34:25 UTC
From: Christopher Cox <chrisTOPHERcOX@coboxincORPOATED.comERCIAL>
Message-ID: <428CA592.8010807@coboxincORPOATED.comERCIAL>
Source record: 1971

http://www.hamvention.org/forums.html
Friday, Room 1, 10:30 - 12:45 TAPR/Digital Forum

Don wrote:
> Are their any activities planned for TAPR this year at Dayton. I will
> obviously stop by the booth if they have one but if anyone knows of
> plan in advance will help plan schedules.
>
> Don
> KB5VP
>

258. Here is the smoking gun

Newsgroup: rec.radio.amateur.space
Date: 2005-05-19 20:07:18 UTC
From: Donald@gregpalast.com
Message-ID: <7498ba4e.59b14cc3@mail.gregpalast.com>
Source record: 1972

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259. AO-27 Back Online

Newsgroup: rec.radio.amateur.space
Date: 2005-05-19 22:13:38 UTC
From: William Erhardt <erhardt@mt.net>
Message-ID: <xtadnRJt9d4JkhDfRVn-ow@mt.net>
Source record: 1973

Howdy from Bill K7MT

Chatted with Mike N3UC and he said batteries are looking good on AO-27 and its back on line. The 22:00 pass was loud and clear with N5AFV Allen, N3UC Mike, and myself making contacts.

If anyone know W1JMM let him know we all heard him loud and clear as he called CQ on AO-27 the entire pass. I don't think he was hearing the down link on 70cm.

Cheers Bill K7MT

260. Re: AO-27 Back Online

Newsgroup: rec.radio.amateur.space
Date: 2005-05-21 05:44:58 UTC
From: Mike <Mike@nowhere.net>
Message-ID: <uVzje.7101$wr.2365@clgrps12>
Source record: 1974

On Thu, 19 May 2005 16:13:38 -0600, William Erhardt wrote:

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>
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> called CQ on AO-27 the entire pass. I don't think he was hearing the down
> link on 70cm.
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> Cheers Bill K7MT

W@W W@W

Will try tomorrow.

73 de Mike VE6HMG

261. Collins 62S-1 VHF Transverter FA

Newsgroup: rec.radio.amateur.space
Date: 2005-05-23 04:35:22 UTC
From: David Stinson <arc5@ix.netcom.com>
Message-ID: <e4dke.8316$cd.7699@trnddc01>
Source record: 1975

You don't see this one often:

http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&Item=5776923356

Thanks for looking.

262. "THE FACE OF MARS", Mariner 9, plus 26---8"X10" Stills

Newsgroup: rec.radio.amateur.space
Date: 2005-05-26 11:13:58 UTC
From: "---..." <aba@ab.com>
Message-ID: <jrbb91hrrfme1md2st6430retn96gq3rqt@4ax.com>
Source record: 1976

"THE FACE OF MARS", Mariner 9, plus 26---8"X10" Stills
http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&item=3977193129

Original Lobby Cards from Films of MARS
http://posterazzi.topcities.com/lists/scifi.htm

263. inmarsat-c

Newsgroup: rec.radio.amateur.space
Date: 2005-05-27 10:58:55 UTC
From: crusaders792002 <crusaders792002@yahoo.com>
Message-ID: <1117191535.677069.192780@o13g2000cwo.googlegroups.com>
Source record: 1977

Can anyone help me? I can't find enough information about standard Inmarsat-C. I found information about Inmarsat-C in the group FAQ-Inmarsat, but this information isn't correctly. I built Matlab receive model and I use Matlab BPSK demodulator. I tryied with this demodulator, afterthat I changed it with Matlab DBPSK demodulator, but results were mostly same. I didn't see synchroword and structure of Inmarsat-C isn't correctly. Are synchroword and frame structure correct? Can anyone to send me more information about my problem? I'm familiar with standard Inmarsat-C, but I want to know more information about structures of Inmarsat-C frame.

PS: My English isn't good. My e-mail:crusaders792...@yahoo.com

264. Re: inmarsat-c

Newsgroup: rec.radio.amateur.space
Date: 2005-05-27 15:25:36 UTC
From: Stephan Walther-Larsen <swl@premiumrx.dk>
Message-ID: <stee91d237j7pas6qlq5qlb8nq2t5khf5p@4ax.com>
Source record: 1978

On 27 May 2005 03:58:55 -0700, "crusaders792002"
<crusaders792002@yahoo.com> wrote:

>Can anyone help me? I can't find enough information about standard
>Inmarsat-C. I found information about Inmarsat-C in the group
>snip<
>information about structures of Inmarsat-C frame.
>
>
>PS: My English isn't good. My e-mail:crusaders792...@yahoo.cï¿½om

you have an excellent english if english isnt your primary language.
Sadly i cant help you with the other stuff. Good luck

265. Re: cash

Newsgroup: rec.radio.amateur.space
Date: 2005-05-29 19:51:01 UTC
From: Buck <iam@this.site>
Message-ID: <f47k91h1krh1do020clr1nlfsc1vm7k2g2@4ax.com>
Source record: 1979

On Sun, 29 May 2005 15:21:27 GMT, "mark new"
<mn011q7024@blueyonder.co.uk> wrote:
<snip>
>READING THIS COULD CHANGE YOUR LIFE!
<snip>

>**REMEMBER, THE MORE NEWSGROUPS YOU POST IN, THE MORE MONEY YOU WILL
>MAKE!! BUT YOU HAVE TO POST A MINIMUM OF 200**

Yeah, right, the more newsgroups you post to, the more likely you will
get suspended from your ISP, the more likely you will lose your email
account and the more likely that the post office will send a postal
inspector to your home to investigate your 'legal' crime!

It'll change your life, alright!

Buck
--
For what it's worth.

266. Uplink vs Downlink freq on HAMSAT?

Newsgroup: rec.radio.amateur.space
Date: 2005-06-04 23:03:10 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <PtydndegIYp6rz_fRVn-3Q@bright.net>
Source record: 1980

The data on VO-52 (HamSat) says:

VUSat-OSCAR 52 (HamSat or VUSat)
Uplink 435.220-435.280 MHz LSB/CW
Downlink 145.870-145.930 USB/CW (Inverting)

Now for the $64K question:

If listening for the downlink at 145.870, would the uplink frequency be
435.220 or 435.280? I would think it would be bad practice to send a
string of CW dits to find out...

Scott
N0EDV

267. Re: Uplink vs Downlink freq on HAMSAT?

Newsgroup: rec.radio.amateur.space
Date: 2005-06-05 10:59:48 UTC
From: Christopher Cox <chrisTOPHERcOX@coboxincORPOATED.comERCIAL>
Message-ID: <EWAoe.23585$XA6.22164@tornado.ohiordc.rr.com>
Source record: 1981

Scott wrote:
> The data on VO-52 (HamSat) says:
>
> VUSat-OSCAR 52 (HamSat or VUSat)
> Uplink 435.220-435.280 MHz LSB/CW
> Downlink 145.870-145.930 USB/CW (Inverting)
>
> Now for the $64K question:
>
> If listening for the downlink at 145.870, would the uplink frequency be
> 435.220 or 435.280? I would think it would be bad practice to send a
> string of CW dits to find out...
>
> Scott
> N0EDV

The key word would be 'Inverting', so transmiting on 435.28 should net a signal on 145.87.

As for sending a string of dits.... well.... seems to standard practice at times.

Regards,

Christopher Cox

268. Re: Uplink vs Downlink freq on HAMSAT?

Newsgroup: rec.radio.amateur.space
Date: 2005-06-05 14:07:34 UTC
From: John Cummings <n4bkn.no@spam.bellsouth.net>
Message-ID: <TqGoe.56445$6k7.43173@bignews4.bellsouth.net>
Source record: 1983

Scott wrote:
> The data on VO-52 (HamSat) says:
>
> VUSat-OSCAR 52 (HamSat or VUSat)
> Uplink 435.220-435.280 MHz LSB/CW
> Downlink 145.870-145.930 USB/CW (Inverting)
>
> Now for the $64K question:
>
> If listening for the downlink at 145.870, would the uplink frequency
> be 435.220 or 435.280? I would think it would be bad practice to send
> a string of CW dits to find out...
>
> Scott
> N0EDV

Not only is the modulation turned over, so is the band edge. USB from
LSB, 145.870 from 435.280 MHz.

John, N4BKN

269. Re: Uplink vs Downlink freq on HAMSAT?

Newsgroup: rec.radio.amateur.space
Date: 2005-06-05 15:46:24 UTC
From: Leif Holmgren <nobody@nowhere.com>
Message-ID: <42A31E50.1090304@nowhere.com>
Source record: 1982

Christopher Cox wrote:
> Scott wrote:
>
> The key word would be 'Inverting', so transmiting on 435.28 should net a
> signal on 145.87.

But then there is also doppler shift to take into account.

> As for sending a string of dits.... well.... seems to standard practice
> at times.

Even if you have a good piece of software and your rig connected to your computer to get autocompensation for doppler, you will have to do something to find yourself. A string of dits may be the solution but keep it short and on low power (even lower than your normal traffic power)

/Leif

270. Re: Uplink vs Downlink freq on HAMSAT?

Newsgroup: rec.radio.amateur.space
Date: 2005-06-06 03:39:31 UTC
From: "news.prodigy.net" <kd6ire@yahoo.com>
Message-ID: <TzPoe.186$Oq7.111@newssvr33.news.prodigy.com>
Source record: 1984

With the right rig control software running you will hear yourself when the satellite comes into view and then make minor adjustments to fine tune your audio for the doppler shift. SatPC32 tracking software can provide this tracking amoung many others. If the software is working you should be withing a few 100 hz on most satellites.

I use a locally developed software from AC6P and it normally puts me right on frequency for each satellite with little or no tuning.

Don
KD6IRE

"John Cummings" <n4bkn.no@spam.bellsouth.net> wrote in message news:TqGoe.56445$6k7.43173@bignews4.bellsouth.net...
> Scott wrote:
>> The data on VO-52 (HamSat) says:
>>
>> VUSat-OSCAR 52 (HamSat or VUSat)
>> Uplink 435.220-435.280 MHz LSB/CW
>> Downlink 145.870-145.930 USB/CW (Inverting)
>>
>> Now for the $64K question:
>>
>> If listening for the downlink at 145.870, would the uplink frequency
>> be 435.220 or 435.280? I would think it would be bad practice to send
>> a string of CW dits to find out...
>>
>> Scott
>> N0EDV
>
> Not only is the modulation turned over, so is the band edge. USB from
> LSB, 145.870 from 435.280 MHz.
>
> John, N4BKN
>
>

271. Re: Uplink vs Downlink freq on HAMSAT?

Newsgroup: rec.radio.amateur.space
Date: 2005-06-06 11:13:25 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <3dadnQcFnowQsjnfRVn-2A@bright.net>
Source record: 1985

I was just looking for a starting point of trying to figure out a math
formula to predict approximately where my uplink signal would have to be
to find myself on the downlink at a specific frequency, +/- doppler.

Scott
N0EDV

Leif Holmgren wrote:

> Christopher Cox wrote:
>
>> Scott wrote:
>>
>> The key word would be 'Inverting', so transmiting on 435.28 should net
>> a signal on 145.87.
>
>
> But then there is also doppler shift to take into account.
>
>
>> As for sending a string of dits.... well.... seems to standard
>> practice at times.
>
>
> Even if you have a good piece of software and your rig connected to your
> computer to get autocompensation for doppler, you will have to do
> something to find yourself. A string of dits may be the solution but
> keep it short and on low power (even lower than your normal traffic power)
>
> /Leif
>

272. Re: Uplink vs Downlink freq on HAMSAT?

Newsgroup: rec.radio.amateur.space
Date: 2005-06-07 21:58:05 UTC
From: Leif Holmgren <nobody@nowhere.com>
Message-ID: <42A6186D.3080701@nowhere.com>
Source record: 1986

Downlink = 581.15 - Uplink
Uplink = 581.15 - Downlink

Regarding doppler shift compensation:
At approach your signals to the sat will be at a higher fq when they reach the sat then where you transmit. Since the transponder is inverting the sigs will be retransmitted at a lower frequency then the formulas above indicate. However as signals travel to you the doppler shift will move them higher again, but only with 1/3 as much as in the other direction (2m vs 70cm).

So:
Set your software to indicate doppler shift on 291.8MHz (2* mid band 2m)

Then use:
Your RX QRG = 581.15 - Your TX QRG - indicated doppler shift at 291.8MHz
Note that when the bird is going away you will be subtracting a negative number for doppler shift.

/Leif

Scott wrote:
> I was just looking for a starting point of trying to figure out a math
> formula to predict approximately where my uplink signal would have to be
> to find myself on the downlink at a specific frequency, +/- doppler.
>
> Scott
> N0EDV
>

273. Re: Uplink vs Downlink freq on HAMSAT?

Newsgroup: rec.radio.amateur.space
Date: 2005-06-08 00:28:49 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <p5mdnVKKyKvlpjvfRVn-jA@bright.net>
Source record: 1987

Thanks Leif,

I'll see if I can plug some of those numbers into my tracking program to compute doppler shift a little better and see how it works out...

Scott
N0EDV

Leif Holmgren wrote:

> Downlink = 581.15 - Uplink
> Uplink = 581.15 - Downlink
>
> Regarding doppler shift compensation:
> At approach your signals to the sat will be at a higher fq when they
> reach the sat then where you transmit. Since the transponder is
> inverting the sigs will be retransmitted at a lower frequency then the
> formulas above indicate. However as signals travel to you the doppler
> shift will move them higher again, but only with 1/3 as much as in the
> other direction (2m vs 70cm).
>
> So:
> Set your software to indicate doppler shift on 291.8MHz (2* mid band 2m)
>
> Then use:
> Your RX QRG = 581.15 - Your TX QRG - indicated doppler shift at 291.8MHz
> Note that when the bird is going away you will be subtracting a negative
> number for doppler shift.
>
> /Leif
>

274. Radio Meteor Obs. Bull. May 2005 eta Aquarids

Newsgroup: rec.radio.amateur.space
Date: 2005-06-09 18:58:41 UTC
From: Chris Steyaert <observations@rmob.org>
Message-ID: <1a4ha1hn1c23p2ra7ah16b23ao32t9dqvs@4ax.com>
Source record: 1988
Cross-posted to: rec.radio.amateur.space,sci.astro.amateur

Radio Meteor Observation Bulletin No. 142 of May 2005 (67 K) is available now as

http://visualrmob.free.fr/rmobtext/rmob0505.txt

More information and the visual presentation of the hourly forward scatter
counts can be found on

http://www.rmob.org

http://radio.data.free.fr

Chris

275. Re: Uplink vs Downlink freq on HAMSAT?

Newsgroup: rec.radio.amateur.space
Date: 2005-06-09 23:43:29 UTC
From: William Erhardt <erhardt@mt.net>
Message-ID: <PaSdnaF-Upq6STXfRVn-qQ@mt.net>
Source record: 1989

Howdy Scott.

Bill Erhardt K7MT in Helena, Mt.

Set your receive for 145.900 (Center of transponder down link) then your transmit to 435.250 (Center of transponder uplink)

With transmitter set to 435.250 your receive will be on 145.893 or down about 7 KCS from center of 145.900 when the satellite comes into view. If you adjust your transmit down 7 kcs your receive will be right on 145.900. As you know this shifts as the bird approaches goes away. Recommend finding your down link then adjusting your transmitter on 70cm to stay on frequency. This is opposite for FO-29 as your find your downlink and adjust your receive to follow the signal down.

Rule of thumb I was told is you adjust the 70 cm side to stay on frequency.

Please remember lower half of the transponder is for CW and upper half is for voice by gentlemans agreement.

Hope this helps Scott.

Bill K7MT AMSAT 33461

276. ANS-163 AMSAT News Service Bulletins

Newsgroup: rec.radio.amateur.space
Date: 2005-06-12 19:37:44 UTC
From: JoAnne Maenpaa <wb9jej_no-spam@earthlink.net>
Message-ID: <ca0re.4089$pa3.187@newsread2.news.atl.earthlink.net>
Source record: 1990

AMSAT NEWS SERVICE
ANS-163

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:

* Call for papers-2005 AMSAT Space Symposium and Annual Meeting
* AMSAT Board of Directors Nominations Due
* AO-51 Configuration for Field Day
* OSCAR-11 Reception Reports Sought
* AMSAT Journal Needs Authors
* Field Day Pictures, Please
* SETTI Express Launch Date
* AMSAT Awards Announcement
* Keplerian Elements Now Available for PDA
* ARISS Status - 06 June 2005

SB SAT @ AMSAT $ANS-163.01
Call for papers-2005 AMSAT Space Symposium and Annual Meeting

AMSAT News Service Bulletin 163.01
From AMSAT HQ SILVER SPRING, MD.
June 12, 2005
To All RADIO AMATEURS
BID: $ANS-163.01

This is the third call for papers for the 2005 AMSAT Space Symposium and Annual Meeting to be held October 7 - 9, 2005 in Lafayette, Louisiana. Proposals for papers and symposium presentations are invited on any topic of interest to the amateur satellite program.

We request a one-page abstract by June 15, 2005. Camera ready copy on paper or in electronic form will be due by August 1, 2005 for inclusion in the printed symposium proceedings. Abstracts and papers should be sent to n8fgv@amsat.org

[ANS thanks Dan, N8FGV for the above information]

/EX

SB SAT @ AMSAT $ANS-163.02
AMSAT Board of Directors Nominations Due

AMSAT News Service Bulletin 163.02
From AMSAT HQ SILVER SPRING, MD.
June 12, 2005
To All RADIO AMATEURS
BID: $ANS-163.02

This is a note to remind everyone that the deadline for nominations for the open Board of Director positions is June 15th. Nominations must be submitted via regular mail; e-mail is not acceptable in this instance. Please mail your nominations to Martha Saragovitz in the Silver Spring, Maryland office.

Regards,
Stephen Diggs
AMSAT Corporate Secretary

[ANS thanks Steve, W4EPI for the above information]

/EX

SB SAT @ AMSAT $ANS-163.03
AO-51 Configuration for Field Day

AMSAT News Service Bulletin 163.03
From AMSAT HQ SILVER SPRING, MD.
June 12, 2005
To All RADIO AMATEURS
BID: $ANS-163.03

AO-51 Field Day Announcement from the Echo Operations Group

For the ARRL Field Day Event this year AO-51 will be configured in Mode V/S FM Repeater. The uplink will be 145.920 mHz. The 67 Hz tone will NOT be used. The downlink will be 2401.200 mHz. There will be a long duration operating session leading up to Field Day when AO-51 will be configured in Mode V/S to give users the opportunity to test their Field Day stations. In June, AO-51 will be in Mode V/S the weekend and entire week before Field Day. Take advantage of these operating sessions to setup and test your Field Day station before the actual day arrives.

Working the Mode S downlink on AO-51 does not require a large investment in equipment for your Field Day station. A satellite dish is not required to operate this mode. Gould, WA4SXM, copied the S downlink using just his G3RUH patch feed during the early days of testing the S band transmitter on Echo. Drew, KO4MA, has operated portable with a Transystems downconverter using the dipole feed and a corner reflector on numerous occasions. Mike, KE4AZN, has operated portable with either a 3.5 turn helix feed (feed only, no dish) or a homebrew K5OE patch antenna, held out the window of the car. Mike has also operated mobile on Mode V/S by attaching the helix feed and downconverter to the trunk of the car. Clare, VE3NPC, has reported excellent receive signals using a 3.5 turn helix and a K5GNA downconverter. Any of

these Amsat members can be contacted at their "@amsat.org" email address and would be happy to help Field Day users get setup for Mode V/S. If your IF is on VHF (which most are), an HT or other mobile FM rig will work fine as your downlink receiver. The large 5 kHz steps of these radios actually make tuning the fast moving Doppler on S band much easier.

Use the scheduled Mode V/S sessions to practice before heading out for Field Day. If you have not worked the S band downlink on AO-51 previously, a few passes monitoring the downlink and practicing the Doppler correction will be very helpful. The Doppler shift on an AO-51 pass is approximately +/- 50 kHz. There will be lots of activity on Field Day, therefore getting your Receive capability working well before transmitting to the satellite, will keep your station from causing unnecessary QRM.

The uplink for AO-51 does not require a large Yagi antenna to be successful. Any good mobile omni direction whip antenna or other omni directional antenna will work fine, especially if all stations work together during the passes and not try to dominate the satellite. Therefore, it should not be difficult to setup an antenna that will work for the uplink to AO-51. If you have a Field Day station with Mode V/U capability, you already have the uplink covered.

A webpage will be setup with a few pictures and text on various AO-51 Mode V/S station options. This will not include every option available, but will hopefully assist a new Mode V/S user with some ideas to get started setting up their station, and show that is it not difficult to get setup and working the S downlink on AO-51.

Web URL: http://www.graceba.net/~mkmk518/echofieldday.html

With the V/S configuration of AO-51 and the other satellites available, we will have a nice compliment of modes to operate during Field Day.

73 KE4AZN for the Echo Operations Group

[ANS thanks Mike, KE4AZN for the above information]

/EX

SB SAT @ AMSAT $ANS-163.04
OSCAR-11 Reception Reports Sought

AMSAT News Service Bulletin 163.04
From AMSAT HQ SILVER SPRING, MD.
June 12, 2005
To All RADIO AMATEURS
BID: $ANS-163.04

There is a small chance that OSCAR-11 may have started transmitting again between 08 June to 10 June.

The frequency is 145.826.

Any reception reports would be appreciated. Please reply direct to
Clive G3CWV (g3cwv@amsat.org), or post reports to AMSAT-BB.

[ANS thanks Clive, G3CWV for the above information]

/EX

SB SAT @ AMSAT $ANS-163.05
AMSAT Journal Needs Authors

AMSAT News Service Bulletin 163.05
From AMSAT HQ SILVER SPRING, MD.
June 12, 2005
To All RADIO AMATEURS
BID: $ANS-163.05

The AMSAT Journal needs the services of writers who have the
talents to interview AMSAT members who have done projects that
need to be shared with all our members.

Such reporters can interview these outstanding people via phone
and develop outstanding articles. Respondents should have a back-
ground in writing and/or reporting with good interview and writing
skills. If you have such a background, and you are willing to help,
please contact Gunther Meisse via e-mail: w8gsm@amsat.org.

[ANS thanks Gunther, W8GSM for the above information]

/EX

SB SAT @ AMSAT $ANS-163.06
Field Day Pictures, Please

AMSAT News Service Bulletin 163.06
From AMSAT HQ SILVER SPRING, MD.
June 12, 2005
To All RADIO AMATEURS
BID: $ANS-163.06

I would like pictures of kids operating satellites on Field Day
2005 for use in our AMSAT printed materials. Please e-mail to
Gunther Meisse, W8GSM at w8gsm@amsat.org. Thanks in advance
for your help.

[ANS thanks Gunther, W8GSM for the above information]

/EX

SB SAT @ AMSAT $ANS-163.07
SETTI Express Launch Date

AMSAT News Service Bulletin 163.07
From AMSAT HQ SILVER SPRING, MD.
June 12, 2005
To All RADIO AMATEURS
BID: $ANS-163.07

Via the weekly news from RSGB: Sunday 5 June 2005

The launch date for SSETI Express and three 'cubesats'
has now been confirmed as 25 August, with the next day,
the 26th, as a back-up.

The satellite has now completed all its pre-launch tests
and is presently back in the clean room where everything
is having a final checkout and where the cubesats are being
loaded into their launchers.

Current plans show that the satellite will be packed and
ready for despatch to the launch site during the last week
of June.

SSETI Express will automatically downlink general telemetry
at 9K6 on 70cm and it will also be possible for amateurs to
request specific downloads.

It is planned that the 38K4 telemetry transmitter on 2.4GHz
will also be available for amateur voice operation as a Mode
U/S transponder after initial tests on the satellite have been
completed.

AMSAT-UK provided the 2.4GHz transmitter for the satellite
and a presentation on SSETI Express will be given at the
AMSAT-UK Space Colloquium to be held from 29 to 31 July at
the University of Surrey in Guildford. All amateurs and SWLs
are welcome to attend.

[ANS thanks RSGB for the above information]

/EX

SB SAT @ AMSAT $ANS-163.08
AMSAT Awards Announcement

AMSAT News Service Bulletin 163.08
From AMSAT HQ SILVER SPRING, MD.
June 12, 2005
To All RADIO AMATEURS
BID: $ANS-163.08

AMSAT Director of Contests and Awards, Bruce Paige, KK5DO, reports
congratulations go out to all of the following:

Amanda Karr, KI4IWS, Satellite Communicators Club and also new member
of AMSAT.

Sebastiano Trovato, IW9HBY, 51 on 51 Award #26
Otfried Fuhrmann, DL2DRD, 51 on 51 Award #27

To see all the awards visit http://www.amsat.org or http://www.amsatnet.com

[ANS thanks Bruce, KK5DO for the above information]

/EX

SB SAT @ AMSAT $ANS-163.09
Keplerian Elements Now Available for PDA

AMSAT News Service Bulletin 163.09
From AMSAT HQ SILVER SPRING, MD.
June 12, 2005
To All RADIO AMATEURS
BID: $ANS-163.09

For those of you using PocketSat or PocketSat+ satellite tracking program for PalmOS PDAs, the weekly Keplerian elements bulletins from AMSAT are now available in PDB format for direct import into the program. The PDB file will be updated automatically each week, shortly after the Keplerian elements bulletins go out to the KEPS mailing list. (This is permitted as a secondary redistribution of the AMSAT Keps bulletins.)

You can get the weekly PDB file with a web browser from:

http://www.amsat.org/amsat/ftp/keps/current/amsat.pdb

... or you can use an FTP program to get them from host ftp.amsat.org, directory /amsat/keps/current, filename amsat.pdb. Username "anonymous", and use your email address for the password. Download in binary mode.

For info on PocketSat and PocketSat+, including instructions on how to import elements from a PDB file, see the BigFatTail Productions web site at http://www.bigfattail.com (not affiliated with AMSAT).

For other programs, the same directory contains the elements in three other formats: AMSAT verbose format and NASA two-line format, both formatted as packet BBS bulletins, and NASA two-line format stripped of all extraneous text. Here are the URLs for those formats:

http://www.amsat.org/amsat/ftp/keps/current/amsat.all
http://www.amsat.org/amsat/ftp/keps/current/nasa.all
http://www.amsat.org/amsat/ftp/keps/current/nasabare.txt

One of these formats should satisfy most satellite tracking programs. For more about Keplerian elements in general, see http://www.amsat.org/amsat-new/tools/keps.php

[ANS thanks Paul, KB5MU for the above information]

/EX

SB SAT @ AMSAT $ANS-163.10
ARISS Status - 06 June 2005

AMSAT News Service Bulletin 163.10
From AMSAT HQ SILVER SPRING, MD.
June 12, 2005
To All RADIO AMATEURS

BID: $ANS-163.10

ARISS Status
June 6, 2005

1. Australian School Contact Successful

On Thursday, June 2, students from Brigidine College in Sydney, New South Wales, Australia spoke directly with the ISS via amateur radio. Eighteen girls were able to ask their questions of John Phillips, KE5DRY, as an audience of two hundred gathered in the auditorium. Two Sydney television stations and other media covered the event. Matt Ryan, the teacher responsible for organizing the contact, remarked, "Students were tracking the space craft, controlling the directional antenna, operating the radio transmitter and talking to an astronaut. Science doesn't come into the classroom better than this."

2. Upcoming School Contacts

Ecole De la Source, Mascouche, Quebec, Canada, has been scheduled for a contact on Friday, June 17 at 13:34 UTC.

3. SuitSat Status

The SuitSat Educational Proposal has been translated into several languages, and distributed to many schools, worldwide. AMSAT has carried the proposal on its website.
See: http://www.amsat.org/amsat-new/articles/SuitsatSchool/

The ARRL has also promoted the project in an article, entitled "ARISS Seeks School Involvement in 'SuitSat' Project." See: http://www.arrl.org/news/stories/2005/06/03/100/?nc=1

Frank H. Bauer, KA3HDO, ARISS International Chairman, and AMSAT V.P. for Human Spaceflight Programs provided this late breaking update to the SuitSat project:

I am proud to announce that on June 10 the ARISS-US team delivered their portion of the Suitsat hardware to the NASA Johnson Space Center. NASA is in the process of shipping this hardware to Energia in Russia where it is expected to be certified and integrated with the Russian team's Suitsat equipment for eventual launch on the 19P Progress launch vehicle in the August/September 2005 timeframe.

The Suitsat amateur radio system, coupled with a school artwork DVD project that will be delivered later this month, is planned to be installed in an outdated Russian Orlon spacesuit in late September. It will then be deployed from the ISS during an Extra Vehicular Activity (EVA, or spacewalk). The Suitsat amateur radio system will beam down special messages and an SSTV image from within the Orlon space suit as it floats in space. Suitsat radio system will allow hams and students to track the suit and decode special international messages, space suit telemetry, and a pre-programmed Slow Scan TV image through its specially-built digital voice

messaging system and amateur radio transmitter. As built, Suitsat will be a transmit-only capability that will run on the space suit's battery power.

The idea for Suitsat was first conceived by the ARISS-Russia team, led by Sergey Samburov, RV3DR, and was extensively discussed at the joint AMSAT Symposium/ARISS International Partner meeting in October 2004. The project, also called Radioskaf or Radio Sputnik in Russia, is being led by project manager A. P. Alexandrov and Deputy Project Manager A. Poleshuk from RSC Energia, located in Korolev (Moscow area) Russia. On the US side, the hardware project development was led by Lou McFadin, W5DID.

Since October the Suitsat design concept matured and evolved due to the challenging development time constraints. A joint NASA letter, allowing the ARISS team to proceed forward with the Suitsat project was signed on May 10, 2005. In the four short weeks since that letter was signed, the US project team, has designed, built and tested a simple, yet fully featured system that we hope will inspire hams and students around the world.

On behalf of the ARISS International team, I want to congratulate the Suitsat hardware development team for their "Can Do" spirit and ability to deliver the Suitsat hardware on such a very challenging schedule.

Congratulations!!!!!

4. Astronaut Training

Kenneth Ransom reports that ESA French astronaut Leopold Eyharts began training for his U.S. amateur radio license. Kenneth has also set up time to present an ARISS overview to John Grunsfeld, KC5ZTF, on June 22. Grunsfeld is a backup for Expedition 13.

5. Dayton Hamvention 2005 Presentations

The presentations given at the AMSAT Forum during the Dayton Hamvention 2005 may be found on the AMSAT website. Inactive astronaut Tony England's presentation entitled, "Amateur Radio/AMSAT: A Motivator for a Career in Science & Engineering," is included. See: http://www.amsat.org/amsat-new/articles/05DaytonPresentations/index.php

6. Field Day

John Phillips, KE5DRY, and Sergei Krikalev, U5MIR, have been invited to participate in ARRL's Field Day, to be held on June 25 - 26. Both Phillips and Krikalev expressed interest in this event and plan to participate on a limited basis. Kenneth Ransom has been working on a list of pass times when U.S. amateur radio operators will be able to contact the ISS crew during this event; however, there are few favorable passes and some will occur in the early morning hours.

[ANS thanks Carol, KB3LKI, and Frank KA3HDO for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the
President's Club. Members of the President's Club, as sustaining donors
to AMSAT Project Funds, will be eligible to receive additional benefits.
Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
JoAnne Maenpaa, WB9JEJ
WB9JEJ at amsat dot org

Via the ans mailing list at AMSAT.ORG courtesy of AMSAT-NA.
To unsubscribe, send "unsubscribe ans" to Majordomo@amsat.org

277. WSR-163 AMSAT Weekly Satellite Status Report

Newsgroup: rec.radio.amateur.space
Date: 2005-06-12 19:39:02 UTC
From: JoAnne Maenpaa <wb9jej_no-spam@earthlink.net>
Message-ID: <qb0re.4090$pa3.3783@newsread2.news.atl.earthlink.net>
Source record: 1991

```
This report is organized into 4 parts.
Part 1 - operational analog amateur satellites.
Part 2 - operational digital amateur satellites.
Part 3 - non - operational satellites
Part 4 - proposed satellites

SB SAT @ AMSAT <KB9MMC $ANS-163.S1
WSR 163 Part 1 06/12/2005

AMSAT NEWS SERVICE BULLETIN 163.S1 FROM AMSAT HQ
SILVER SPRING, MD, JUNE 12, 2005
TO ALL RADIO AMATEURS
BID: $ANS-163.S1

HAMSAT VO-52
Catalog Number: ?
Launch Date: May 05,2005

Status: On orbit
Current Mode: U/V

Proposed frequencies:
--------------------
Indian transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacom : 145.940MHz continue carier signal

Dutch transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacon : 145.860MHz 12WPM with CW message

HAMSAT has been assigned the OSCAR designation VO-52.
[05152005]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - ON
FM REPEATER - ON

Analog voice downlink: 435.300 MHz FM
Analog voice uplink: 145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone
```

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

AO-51 Schedule of Modes for June 2005:

12 June (at conclusion of Kid's Day)
FM Repeater, V/U, High Power Mode
Uplink: 145.920 MHz FM, 67 Hz PL Tone
Downlink: 435.300 MHz FM

15 June (2 day session)
9k6 Digital, V/U, High Power, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 MHz FM, 9k6 PBP Digital
Downlink: 435.150 MHz FM, 9k6 PBP Digital

17 June
FM Repeater, V/S (Field Day Configuration)
Uplink: 145.920 MHz FM
Downlink: 2401.200 MHz FM

27 June
FM Repeater, V/U
Uplink: 145.920 MHz FM, 67 Hz PL Tone
Downlink 435.300 MHz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 MHz FM, 9k6 PBP Digital
Downlink: 435.150 MHz FM, 9k6 PBP Digital

All dates are UTC.

For further scheduled modes/tests, check out the Echo status page at:
http://www.amsat.org/amsat-new/echo/

Mike Kingery (KE4AZN) has released a upgrade to TimEcho to capture and
decode telemetry broadcast from Echo's digital downlink. TimeEcho
software and other Ao-51 ECHO information is available at:
http://web.infoave.net/~mkmk518/echo.htm

[ANS thanks Mike, KE4AZN for the above information]
[05292005]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz (67.0 Hz PL tone) (See below for operating
procedures)
Downlink: 436.795 MHz

There have been unconfirmed reports on the amsat-bb remailer that So-50 has
shifted downlink frequency as much as 5khz up. This both from Europe.

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary)

1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm
the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT
the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window
will reset the 10 minute timer.
[09122004]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplink: 145.850 145.870 145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Please send the reception reports to lab2 'at' jarl.or.jp.
Please use the subject line: 'FO-29 reception report'.

Mineo, JE9PEL, has an FO-29 satellite telemetry analysis program that will
automatically analyze all digital telemetry from the satellite (such as
current, voltage and temperature). FO29CWTE is available at:
http://www.ne.jp/asahi/hamradio/je9pel/
[03132005]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

The latest information on AO-27 from control operator Michael Wyrick,
N3UC (former N4USI), can be found at:
http://www.ao27.org

An AO-27 question-and-answer page is available on the AMSAT-NA web
site, with updates by Ray, W2RS. The URL is:

http://www.amsat.org/amsat/intro/ao27faq.html

[ANS thanks John, K6YK, for this week's AO-27 report]
[08292004]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Semi-operational in sunlight.
Return to active status: June 21,2002

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A
145.975 to 145.925 MHz CW/USB Mode B
Beacon: 29.502 MHz, 145.972 MHz, 435.1 MHz, 2304.1 MHz

Emily, W0EEC has created a website to allow the users of AO-7 to record
contacts, observations and use of the satellite more effectively at:
http://www.emilyshouse.com/experthams/ao7/main.php
This includes the ability to log contacts.

Tim, K3TZ has written a program to decode AO-07 telemetry.
The program can be downloaded at:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

For more AO-7 info:
http://www.amsat.org/amsat/sats/n7hpr/ao7.html
[11142004]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Packet (APRS-style connections)
Digipeater: Active

The current Expedition 11 crew is:
Commander Sergei Krikalev
Flight Engineer John Phillips

Worldwide packet uplink: 145.990 MHz FM
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM
Doppler Shift is 10 KHz

Russian callsigns: RS0ISS, RZ3DZR
USA callsign: NA1SS

Packet station mailbox callsign: RS0ISS-11
Packet station keyboard callsign: RS0ISS-3
Digipeater callsign: ARISS

The ISS daily crew schedule can be found at:
http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is
NOT translated from Russian and posted.

More information is available at:
http://www.rac.ca/ariss
http://spaceflight.nasa.gov/station/reference/radio/
http://www.marexmg.org/fileshtml/unprotopage.html
http://www.issfanclub.com
http://oscar.dcarr.org/
[04242005]
NNNN
/EX

SB SAT @ AMSAT <KB9MMC $ANS-163.S2
WSR 163 Part 2 06/12/2005

AMSAT NEWS SERVICE BULLETIN 163.S2 FROM AMSAT HQ
SILVER SPRING, MD, JUNE 12, 2005
TO ALL RADIO AMATEURS
BID: $ANS-163.S2

AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - OFF
FM REPEATER - ON

Analog voice downlink: 435.300 MHz FM
Analog voice uplink: 145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

AO-51 Schedule of Modes forJune 2005:

12 June (at conclusion of Kid's Day)
FM Repeater, V/U, High Power Mode
Uplink: 145.920 MHz FM, 67 Hz PL Tone
Downlink: 435.300 MHz FM

15 June (2 day session)
9k6 Digital, V/U, High Power, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 MHz FM, 9k6 PBP Digital
Downlink: 435.150 MHz FM, 9k6 PBP Digital

17 June
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27 June
FM Repeater, V/U
Uplink: 145.920 MHz FM, 67 Hz PL Tone
Downlink 435.300 MHz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 MHz FM, 9k6 PBP Digital
Downlink: 435.150 MHz FM, 9k6 PBP Digital

All dates are UTC.

For further scheduled modes/tests, check out the Echo status page at:
http://www.amsat.org/amsat-new/echo/

Mike Kingery (KE4AZN) has released a upgrade to TimEcho to capture and
decode telemetry broadcast from Echo's digital downlink. TimeEcho
software and other Ao-51 ECHO information is available at:
http://web.infoave.net/~mkmk518/echo.htm

[ANS thanks Mike, KE4AZN for the above information]
[05292005]
=====
GO-32 TECHSAT-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
(435.325 n/a - temperature problems)
Uplinks: 145.850, 145.890, 145.930 FM
1269.700, 1269.800, 1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[03132005]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink: 145.850 or 145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz
Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[05152005]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for APRS users.

Uplink: 145.90 145.92 145.94 145.96 MHz FM
(using 1200-baud Manchester FSK)
Downlink: 437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon: 2401.1428 MHz
Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

A WOD collection of current graphics along with general information and telemetry samples can be found at:
http://www.telecable.es/personales/ea1bcu
[05092004]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational?

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK).
approx. 10 days ON, 10 days OFF
Mode-S Beacon: 2401.500 MHz. ... OFF
UHFBeacon: 435.025 MHz. ... OFF

This from Clive, G3CWV:

There is a small chance that OSCAR-11 may have started transmitting again between 08 June to 10 June.

The frequency is 145.826.

Any reception reports would be appreciated. Please reply direct to Clive G3CWV (g3cwv@amsat.org), or post reports to AMSAT-BB.

[ANS thanks Clive, G3CWV for the above information]

More information on UO-11 OSCAR-11 can be found at:
http://www.users.zetnet.co.uk/clivew/
[06122005]
NNNN
/EX

SB SAT @ AMSAT <KB9MMC $ANS-163.S3
WSR 163 Part 3 06/12/2005

AMSAT NEWS SERVICE BULLETIN 163.S3 FROM AMSAT HQ
SILVER SPRING, MD, JUNE 12, 2005
TO ALL RADIO AMATEURS
BID: $ANS-163.S3

THE FOLLOWING ARE IN ORBIT BUT ARE
NON-OPERATIONAL AT THIS TIME:

POSAT-1 PO-28
Catalog Number: 22829
Launched : September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 435.075 MHz
435.275 MHz

Uplink: 145.925 MHz
145.975 MHz

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

More information of POSAT-1 can be found at:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
http://www.amsat.org/amsat/sats/n7hpr/po28.html
[08152004]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon: 145.810 MHz (unmodulated carrier)

AO-10 has been locked into a Mode-B, 70-cm uplink and
2-meter downlink for several years.

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
IO-26 ITAMSAT

Catalog number: 22826
Launch Date: September 26, 1993

Status: Non-operational

Uplink: 145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink: 435.812 MHz SSB
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Alberto E. Zagni - I2KBD reports on 02/13/05
The spacecraft is in MBL (safe mode) and is trasmitting just 6 channels
of telemetry. Temperatures and voltage are nominal, but there seems to
be a problem with the onboard receiver, refusing to accept commands.
The spacecraft was launched in 1993, thus nearing 12 years in orbit...

Best regards
Alberto E. Zagni - I2KBD
ITAMSAT Mission Director

More information of IO-26 can be found at:

http://joshua.micronet.it/english/itamsat/itamsathome.html
http://www.amsat.org/amsat/sats/n7hpr/io26.html
www.itamsat.org

[02132005]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon: 29.408 MHz
Robot: 29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB
Beacon: 145.860 MHz
Robot: 145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437

Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB
Beacon: 29.352 MHz (intermittent)
SSB meeting frequency: 29.380 MHz (unofficial)

John, KD6PAG reports on June 16, 2004 to ANS:
RS-15 beacon seemed to be back in the mode where it's a tone about 5 seconds
off and then 5 seconds on this morning.

ANS is looking for more confirmations of RS-15 coming back.

[ANS thanks John, KD6PAG for RS-15 information]
[06202004]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplink: 145.84 145.86 145.88 145.90 MHz FM
(using 1200-baud Manchester FSK)
CW downlink: 437.125 MHz
Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)
Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM
Broadcast Callsign: HLO1-11
BBS: HLO1-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a
non-operational status.
[05092004]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM (9600-baud FSK)
Downlink: 436.500 MHz FM
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink frequency (listed on the PanSat web site) 436.500 MHz

The satellite is not available for general uplink transmissions.

The Naval Postgraduate School developed PanSat. At the time of
launch, PanSat spread-spectrum digital transponders were to
be available to Amateur Radio operators along with software to utilize
this technology.

The satellite is still operating, however, the spread spectrum packet
radio portion never took place. The spacecraft is now beyond it's
initial 2-year mission life, but telemetry records are still being
downloaded.

For more information, visit the official PanSat web site at:
http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS has no further information]
[05232004]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlink: 437.025 MHz 437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA
web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplink V-band 145.840 - 145.990 MHz CW/LSB
U-band 435.550 - 435.800 MHz CW/LSB
L1-band 1269.250 - 1269.500 MHz CW/LSB
L2-band 1268.325 - 1268.575 MHz CW/LSB
S1-band 2400.350 - 2400.600 MHz CW/LSB
Downlink: S2-band 2401.225 - 2401.475 MHz CW/USB
K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon: 2401.323, 24,048.035
[05232004]

SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational

Uplink: to be released
Downlink: 437.075 MHz
Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz
Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]

=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Non-Operational?????

Uplink/downlink: 145.827 MHz 1200 baud AX.25 AFSK via W3ADO-1
Aux/Uplink: 435.250 MHz 9600 baud via PCSAT-2 (off)
APRS Downlink: 144.390 MHz (Region 2)

This from Bob, WB4APR:
PCsat returned to negative-power-budget mode on 16 Feb 2005 and is not
expect- ed to be restorable until the next full-sun period in the Fall
when the southern Sun can better illuminate the south facing panel.
Between now and then you are welcome to try to get a packet digipeated,
but this will usually only work during mid-day passes in the Northern
Hemisphere due to sun angles.

Question asked of Bob WB4APR recently on the amsat-bb:
Is it alive?? I was just looking at the pcsat.aprs.org page at Findu
and it shows a lot of stations recently (within the last day) digipeating
through it.

Bob's reply:
PCsat is always "alive", but can only muster enough
power to get out a complete packet when it is in
near mid-day sun in the Northern hemisphere the
higher the latitude the better in the summer.

Over the next 2 weeks PCsat is entering one of thoes
periods. The 20 or so stations you see on the LIVE
web page are probably unattended beacons. But
if u hear good packets on 145.825 from PCsat during
mid-day, go ahead and use it...

Fortunately it will be in 100% sun during FD, but
Unfortunately, all that sun is from the side and
misses the best solar panel. Experience has shown
it will be useless at that time.

PCSat is a 1200-baud APRS digipeater designed for use by stations using
hand-held or mobile transceivers. Downlinks feed a central web site at:
http://pcsat.aprs.org

The APRS-equipped PCSat was built by midshipmen from the U.S. Naval Academy
under the guidance of Bob Bruninga, WB4APR.
[05242005]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
callsign KE6QMD, as per the user service agreement located at the following
URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Semi-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

AO-49 (SAFIR-M) is a German amateur radio payload onboard the small German
scientific satellite "RUBIN-2".

AO-49 was built by the German amateur radio association "AATiS
e.V." (German
acronym for "Arbeitskreis Amateurfunk und Telekommunikation in der Schule",
which means: 'working group for amateur radio anand telecommunications in
schools'). AO-49 is designed as a "store and broadcast" system for APRS
based messages, dedicated for the use of schools in combination with the
existing WX-Net and planned buoy experiments in Germany.

No transmissions detected since the 1st of February 2003! It appears
AO-49 is not properly aligned to illuminate the solar panels. This
should end soon. Due to its orbit, AO-49 will be in a phase without
eclipses until 13Feb03.

Martin DG8UAU has written a small software program "SAFIR-M Decoder" to
allow decoding of the received DATA0 frames. It is available at:
http://amend.gmxhome.de in the section Aktuelles.

Details on AO-49 (SAFIR-M) can be found at:
http://amend.gmxhome.de

Information about AATiS e.V. is available at:
http://www.aatis.de
[05092004]
=====
CUTE-1
Catalog number: 27844
Launched: June 30,2003

Status: Operational?

Uplink: ?
Downlink: 436.8375 CW
437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan)

Fernando, LU1HKO, reports hearing Cute-1 on 03/06/2005 18:40 (LU Time)
sending
CW telemetry.

CUTE 1 is a Japanese (Tokyo Institute of Technology) one kilogram
nanosatellite that was launched by a Rokot rocket from Plesetsk at
14:15 UT on 30 June 2003. It carries a 100 mW beacon at 436.8375 MHz.
Initial orbital parameters were period 101.4 min, apogee 831 km, perigee
819 km, and inclination 98.7?.

For further info about CUTE-1 goto:
http://lss.mes.titech.ac.jp/ssp/cubesat/operation/Schedule_e.html

ANS WSR is looking for more information about this satellite.
[03272005]
NNNN
/EX

SB SAT @ AMSAT <KB9MMC $ANS-163.S4
WSR 163 Part 4 06/12/2005

AMSAT NEWS SERVICE BULLETIN 163.S4 FROM AMSAT HQ
SILVER SPRING, MD, JUNE 12, 2005
TO ALL RADIO AMATEURS
BID: $ANS-163.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE
PROPOSED FOR LAUNCH AT THIS TIME:

UCISAT ?O-??
Catalog number:
Proposed Launch Date: October 31, 2005

Status: Under Construction

Downlink: Submission in Progress
Uplink: Submission in Progress
Callsign: Submission in Progress

This from Matt Bennett, KF6RTB, UCISAT Communications Team Member:

Our website is www.ucisat.net .This is a new website, however, and doesn't
have the "Status" section active yet. Because of the growing interest in our
project, I'll push our webmaster to create updates (hopefully) on a week-to-
week basis. For now, the current status of the mission is as follows:

-Expected Launch Date: October 31st, 2005
-Frequency Allocation: Submission in Progress
-Construction Status: Sub-Assembly
[WSR to thank Matt Bennett, KF6RTB, for this week's report.]
[01302005]

=====
SSETI ?O-??
Catalog Number:
Proposed Launch Date: Early 2005

Status: Under Construction

During the last week, the completed modules have been fitted to the spaceframe and the wiring harness and integration completed. The satellite was moved on Wednesday to an anechoic chamber for EMC testing to ensure that the emissions from the satellites electronics, the 3W UHF transmitter and the S Band TX meet the spectral requirements of the launch agency and SSTL.

Several new pictures showing the rapid progress over the last 2 weeks have been uploaded to the SSETI Website. These include detailed shots of the S Band unit now wired to the antennas, cold gas propulsion and some taken inside the anechoic chamber.
http://sseti.gte.tuwien.ac.at/WSW4/express5.php

[ANS thanks David, G0MRF for the above information]

Looking at the website for the SSETI Express webcam
http://sseti.gte.tuwien.ac.at/WSW4/webcam.htm

[04102005]
=====
PCSAT2 ?0-??
Catalog Number:
Proposed Launch Date: May 2005

PCSAT2, which had previously been stowed in the Space Shuttle Discovery, arrived at Launch Complex 39B on 07 April 2005. PCSAT2 is now standing by ready to be launched on the first Space Shuttle return-to-flight mission.

PCSAT2 will use the same dual redundant AX.25 command and control system as used on PCsat (NO-44) offering 8 on/off commands, 5 telemetry channels and a serial port for the solar cell experiment telemetry. It also supports the Digital Comms Relay support of the PCsat/APRS mission. The packet uplink is on 145.825 MHz and the default downlinks are in the 435 MHz band to avoid any possible interference with existing ARISS missions. PCSAT2 will have quad redundant transmit inhibits for EVA safety issues, thus, it is also easy to turn off to avoid any issues with other UHF ARISS experiments that may be activated in the future. Also, the mission lifetime of PCSAT2 is only 1 year, because it is a sample-return mission, thus terminating any long term conflicts in spectrum management.

The PCSAT2 mission is intended as an opportunity to augment existing ARISS communications experiments with an external autonomous communications payload. In this regard, it has several potential uses:

* A UI-Digipeater to help ease congestion on the currently shared
ARISS PMS (Packet Mail system)

* A PSK-31 transponder for multi-user communications to improve
accessibility for schools and ARISS outreach programs.

* An FM Voice repeater for full duplex crew communications to
facilitate crew-to-school ARISS contacts.

* Routine Telemetry on the spacecraft systems

For more information and pictures visit the PCSAT2 website at
http://www.ew.usna.edu/~bruninga/pcsat2.html

[ANS thanks Bob, WB4APR for the above information]
[04102005}
=====
PHASE 3E ?O-??
Catalog Number:
Proposed Launch Date: Early 2006

Status: Under Construction

The AMSAT-Phase 3E satellite (P3E) is dedicated as communication and
scientific platform for a highly elliptical orbit around Earth. The
spacecraft will be created in a joint process together with the P5A
Mars mission by an international team under leadership of AMSAT-DL
and continues the successful series of AMSAT-Phase 3 satellites.
Additionally the spacecraft will be a test bench for technology
developped for the Mars mission. The main task of P3E is to act as
communication platform for radio amateurs worldwide. A launch is
planned in the period 2004 to 2006.

For the latest project status update please visit the AMSAT-DL
P3-E web page:
http://www.amsat-dl.org/p3e/
[03272005]
=====
CP1 ?o-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N6CP
Proposed Transmit Frequency: 436.845
[03272005]
=====
CP2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.325
[03272005]
=====

HAUSAT1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: D90HP
Proposed Transmit Frequency: 437.465
[03272005]
=====
ICE Cube 1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: W2CXM
Proposed Transmit Frequency: 437.305
[03272005]
=====
ICE Cube 2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N2VR
Proposed Transmit Frequency: 437.425
[03272005]
=====
ION ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.505
[03272005]
=====
KUTEsat ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: KC0RMW
Proposed Transmit Frequency: 437.385
[03272005]
=====
MEROPE ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: K7MSU-1
Proposed Transmit Frequency: 145.980
[03272005]
=====
nCUBE1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
2407.25
[03272005]
=====
RINCON ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
437.345
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SEEDS ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: JQ1YGU
Proposed Transmit Frequency: 437.485
[03272005]
=====
Mea Huaka ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.405
[03272005]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the
President's Club. Members of the President's Club, as sustaining donors
to AMSAT Project Funds, will be eligible to receive additional benefits.
Application forms are available from the AMSAT-NA Office.

This week's Weekly Satelite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the
memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen,
G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

Via the ans mailing list at AMSAT.ORG courtesy of AMSAT-NA.
To unsubscribe, send "unsubscribe ans" to Majordomo@amsat.org

278. Re: Uplink vs Downlink freq on HAMSAT?

Newsgroup: rec.radio.amateur.space
Date: 2005-06-13 11:07:49 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <fLednUXtOoIq9TDfRVn-2Q@bright.net>
Source record: 1992

I've always been a little confused by "adjust uplink frequency to keep downlink at some specific downlink frequency"...If I do that, I will be able to hear myself properly tuned in and not sounding like Donald Duck, but what if I'm talking to a station where the satellite is moving away from them and toward me (or vice versa)? By adjusting my uplink to compensate for MY doppler shift, won't he have to be constantly have to keep adjusting his receive frequency to hear me properly? Now if he has to do this, how can he keep adjusting his uplink to keep himself on one downlink frequency?

Scott
N0EDV

William Erhardt wrote:
> Howdy Scott.
>
> Bill Erhardt K7MT in Helena, Mt.
>
> Set your receive for 145.900 (Center of transponder down link) then your
> transmit to 435.250 (Center of transponder uplink)
>
> With transmitter set to 435.250 your receive will be on 145.893 or down
> about 7 KCS from center of 145.900 when the satellite comes into view. If
> you adjust your transmit down 7 kcs your receive will be right on 145.900.
> As you know this shifts as the bird approaches goes away. Recommend finding
> your down link then adjusting your transmitter on 70cm to stay on frequency.
> This is opposite for FO-29 as your find your downlink and adjust your
> receive to follow the signal down.
>
> Rule of thumb I was told is you adjust the 70 cm side to stay on frequency.
>
> Please remember lower half of the transponder is for CW and upper half is
> for voice by gentlemans agreement.
>
> Hope this helps Scott.
>
> Bill K7MT AMSAT 33461
>
>

279. Re: Uplink vs Downlink freq on HAMSAT?

Newsgroup: rec.radio.amateur.space
Date: 2005-06-13 19:45:38 UTC
From: Leif Holmgren <nobody@nowhere.com>
Message-ID: <42ADE262.6090402@nowhere.com>
Source record: 1993

The "right" way to do it is to keep the frequency stable at the satellite. Without software support this is hard, but if you don't do it you will drift over the passband whatever method you use. As you already guessed stations in different places that experience different doppler shift -> your QSOs will drift into eachother.

There is a good article at amsat's website that describes all the problems

http://www.amsat.org/amsat/features/one_true_rule.html

/Leif

Scott wrote:
> I've always been a little confused by "adjust uplink frequency to keep
> downlink at some specific downlink frequency"...If I do that, I will be
> able to hear myself properly tuned in and not sounding like Donald Duck,
> but what if I'm talking to a station where the satellite is moving away
> from them and toward me (or vice versa)? By adjusting my uplink to
> compensate for MY doppler shift, won't he have to be constantly have to
> keep adjusting his receive frequency to hear me properly? Now if he has
> to do this, how can he keep adjusting his uplink to keep himself on one
> downlink frequency?
>
> Scott
> N0EDV

280. Re: Filetoad.com Latest Software Virus and spyware

Newsgroup: rec.radio.amateur.space
Date: 2005-06-15 04:56:22 UTC
From: clem <clem_barefoot@my_cb_is_better_then_yours.com>
Message-ID: <42AFB4F5.C6839CD9@my_cb_is_better_then_yours.com>
Source record: 1994

scumbag spammers. if it is a 1 time spamming why do we need to goto
your scumbag site ?

This is a once only mailing , to remove from future newsgroup emailing
please goto http://www.Filetoad.com

"Filetoad.com" wrote:

>
>
> We are a new website providing the Latest software and latest virus
> and spyware updates
> for your computer it will save you lots of time in the future please
> take a look
>
> thankyou.
>
> http://www.Filetoad.com team
>
> This is a once only mailing , to remove from future newsgroup emailing
> please goto http://www.Filetoad.com
>
> if this has been posted in the incorrect group please accept our
> apology

281. ANS-170 AMSAT News Service Bulletins

Newsgroup: rec.radio.amateur.space
Date: 2005-06-19 15:06:02 UTC
From: JoAnne Maenpaa <wb9jej_no-spam@earthlink.net>
Message-ID: <uRfte.8037$VK4.1947@newsread1.news.atl.earthlink.net>
Source record: 1995

AMSAT NEWS SERVICE
ANS-170

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:

* IARU Speadsheets on Small Satellites Available
* Send Your Name to Pluto!
* AO-51 Configuration
* AMSAT Journal Article Timing
* ISS Crew could be on the air for Field Day.
* SSETI Announcement
* Small Payload Conference

SB SAT @ AMSAT $ANS-170.01
IARU Speadsheets on Small Satellites Available
AMSAT News Service Bulletin 170.01
>From AMSAT HQ SILVER SPRING, MD.
June 19, 2005
To All RADIO AMATEURS
BID: $ANS-170.01

One of the biggest challenges any satellite communications engineer has is to develop a link budget that shows what might work and what wont! At the STEC 2005 Conference held in Aarlborg in April, and previously reported on ANS, Jan King briefly showed his suite of graphic spreadsheets which help satisfy this need.

It is fully annotated with guidance notes and includes graphical representations of orbit data, antenna radiation patterns etc.

As an added benefit he has also produced an on-board power budget spreadsheet and one covering the mass budget.

All of these are now available for download from the link at http://www.amsat.org.uk/iaru

It is anticipated that a short presentation of these exciting tools will be given during the AMSAT-UK Colloquium which will be taking place

at the University of Surrey between July 29-31st
http://www.uk.amsat.org/Colloquium/

cheers

Graham

[ANS thanks David Johnson, G4DPZ, for the above information]

/EX

SB SAT @ AMSAT $ANS-170.02
Send Your Name to Pluto!

AMSAT News Service Bulletin 170.02
From AMSAT HQ SILVER SPRING, MD.
June 19, 2005
To All RADIO AMATEURS
BID: $ANS-170.02

Join the New Horizons team as we unlock the secrets of Pluto, Charon
and the Kuiper Belt - sign up to send your name on the New Horizons
spacecraft! Names entered on the mission Web site will be recorded onto
a special compact disc, which the team plans to mount on the spacecraft
before its journey. After signing up you can print a personalized
participation certificate.

Visit here for the sign-up form:

http://pluto.jhuapl.edu/ecard/sendName_ecard_content.html

--
73 de JoAnne WB9JEJ

[ANS thanks Joanne, WB9JEJ, for the above information]

/EX

SB SAT @ AMSAT $ANS-170.03
AO-51 Configuration

AMSAT News Service Bulletin 170.03
From AMSAT HQ SILVER SPRING, MD.
June 19, 2005
To All RADIO AMATEURS
BID: $ANS-170.03

From the Satellite Software Development Team:

Due to restrictions in the Satellite, there can be no digi functionality
on Echo at this time.

Explanation:
Random noise from a receiver that is fed through the demodulator and
into the SCC (a sort of smart UART) will cause interrupts to be sent to
the CPU. With Echo having 4 or 5 open receivers the number of interrupts

was enough to cause the CPU difficulties in getting normal processing done in a timely fashion. Basically, the CPU was locked up trying to handle the interrupts. Echo is operating its SCC ports in a mode that will only pass AX.25 packets beginning with a certain character, which is called 'block' mode. This configuration solved the interrupt problem. For Echo, with the call sign being "PACB or PECHO", only packets beginning with the character 'P' can get through the SCC and generate a CPU interrupt.

A digi packet has the call sign of the destination station first, followed by the satellite (relay) call sign, and then the originator call sign. Therefore, the digi packet will not get through the SCC unless the destination station call sign begins wit htheletter'P'.

A great deal of effort was put into solving this problem. This solution is the only one at the present time that has worked well enough to implement in the Satellite.

[ANS thanks Mike, KE4AZN for the above information]

/EX

SB SAT @ AMSAT $ANS-170.04
AMSAT Journal Article Timing

AMSAT News Service Bulletin 170.04
>From AMSAT HQ SILVER SPRING, MD.
June 19, 2005
To All RADIO AMATEURS
BID: $ANS-170.04

Everyone,

Once again I must notify you that the May-June issue of the Journal will be late. I still am having some problems with the timing of article submissions. Here is the schedule that I want to adhere to:

Odd numbered months of the year - All articles submitted to me no later than mid-week 3 of the month.

Even numbered months of the year - Completed issue PageMaker files submitted to the printer during week 1

(January = month 1, February = month 2 and so on)

Once the Journal is in the hands of the printer my job is done for that issue unless the printer has questions of some kind or if he can't read a file I've sent or something. From that point it's their job to print it and get it out to you as soon as possible.

Unfortunately due to a lot of reasons (all of which are good) articles have not been arriving according to this schedule. This puts the Journal into your hands late. I sincerely apologize for this.

I want you to understand that I take the Journal very seriously and am trying to do the best job my amateurish hands can do. So please bear with me and I will continue to work hard to get the Journal out on time. I spend a great deal of time on the Journal putting it together and I'm trying daily to make it better. I also have a more-than-full-time job to hold down.

Potential authors - Please send me your contributions. I anxiously await them!

73,

Ed Long
WA4SWJ
Editor, The AMSAT Journal

[ANS thanks Ed Long, WA4SWJ, for the above information]

/EX

SB SAT @ AMSAT $ANS-170.05
ISS crew could be on the air for Field Day.
AMSAT News Service Bulletin 170.05
>From AMSAT HQ SILVER SPRING, MD.
June 19, 2005
To All RADIO AMATEURS
BID: $ANS-170.05

ISS crew could be on the air for Field Day.

International Space Station crew members John Phillips, KE5DRY, and Sergei Krikalev, U5MIR, may be on the air for ARRL Field Day, June 25-26. ISS Ham Radio Project Engineer Kenneth Ransom, N5VHO, at Johnson Space Center, has reviewed potential ISS pass times, and he says a few are favorable for US stations--although some will occur during the very early morning hours. Phillips and Krikalev will use the Amateur Radio on the International Space Station (ARISS) radio gear aboard the spacecraft.

''Hams on the ISS will try to be on for ARRL Field Day,'' Ransom said. ''The crew can make contacts anytime during the 1800 UTC June 25 to 1800 UTC June 26 period as time permits. Most activity will be over North and South America, but stations worldwide should be listening.''

Ransom says the pass times are only recommendations, and there is no guarantee that either Phillips or Krikalev will actually be on the air during any of them. Passes marked by asterisks (*) are recommended as desirable ones for voice contacts with Amateur Radio stations on the ground.

Saturday, June 25
1826-1834 Hawaii
1852-1902 Southern Chile Argentina

Sunday, June 26
0743-0804 Canada and NW US
0847-0901 Central and eastern Australia
0919-0938 Southern Canada and NE US
1020-1035 Western Australia
1053-1115 Alaska, SW Canada and eastern US
1110-1130 Caribbean, NE South America
1211-1223 Eastern Japan
1226-1248 Alaska, Western US
1246-1306 Central South America
1346-1359 Western Japan
1428-1442 Central Argentina
1606-1617 Southern Chile and Argentina
1715-1725 Hawaii

Phillips will operate as NA1SS and handing out ''1 Alfa ISS'' for a report. If Expedition 11 Commander Krikalev gets on the air too, he'll identify as RS0ISS and give the same exchange. In the past, crew members have operated from both the Phase 1 and Phase 2 ARISS stations using 2 meters and 70 cm.

The standard ISS voice frequencies for contacts in ITU Region 2 are 144.49 MHz up and 145.80 MHz down, FM.

If the astronauts can't get on the air to make voice QSOs, the RS0ISS packet station should be on and available for ground stations to work each other via the packet digipeater using ''ARISS'' as the alias for the call sign in UNPROTO mode. Frequencies are 145.99 MHz up and 145.80 MHz down.

ARRL Contest Branch Manager Dan Henderson, N1ND, notes that ISS voice or direct packet contacts with the ISS do not count for bonus satellite contact points because the ISS is not an ''Amateur Radio satellite'' as event rules specify. Packet contacts relayed via the ISS are valid.

''The ISS contacts do not count for satellite credit, since they are point-to-point, whereas the traditional satellite QSO is a relayed Earth-satellite-Earth two-way contact,'' he explained. Field Day has no specific rules relating to ARISS operation because there's no guarantee that the crew will be able to get on the air for the annual exercise.

During Field Day 2004, astronaut Mike Fincke, KE5AIT, operated NA1SS on 2 meters, while Expedition 9 Commander Gennady Padalka, RN3DT, was on the air from RS0ISS on 70 cm. Between them, they racked up more than five dozen QSOs.

[ANS thanks ARRL HQ for the above information]

/EX

SB SAT @ AMSAT $ANS-170.06
SSETI Announcement

AMSAT News Service Bulletin 170.06
>From AMSAT HQ SILVER SPRING, MD.
June 19, 2005
To All RADIO AMATEURS
BID: $ANS-170.06

The preliminary pre-launch keps for the Cosmos launch scheduled for August 25th have been announced.

This launch includes the SSETI Express spacecraft that will be carrying an amateur U/S FM transponder.

SSETI1
1 33001U 05066C 05237.44790000 -.00000001 00000-0 10000-4 0 16
2 33001 98.1900 134.5000 0000001 0.0000 0.0000 14.60830000 00013

These are only provisional and maybe refined nearer the launch date!

This satellite is sponsored by the Education Office of the European Space Agency and is the first in a series of student built satellite projects that are underway. Their next project "ESEO" is scheduled for 2007/8 launch into a GTO orbit.

For the SSETI Express programme ESA are very keen to have as many amateurs contributing received downlinked telemetry on 437MHz and 2.4GHz to a central database. They recognise that our "worldwide" network is a unique facility that is not otherwise available to them

A new website giving full details of the telemetry, how to decode it and how to forward it to the SSETI database is being currently being developed and initial information should be made available within the next four weeks.

In the meantime we can further report that the launch is expected to be broadcast live on this "free to air" satellite downlink.

Astra 1 G at 19.2 degrees east:

Transponder: 1.108
Reception frequency: 12551.50 MHz
Polarization: Vertical
Symbolrate: 22Msymb/s
FEC: 5/6
TS_ID: 1108
ON_ID: 1
Service Name: ESA
Service provider: ASTRA
Service_ID: 12140
TXT: none

As this only covers Europe we are also hoping to be able to stream the sound and video over the internet - more news will follow on this nearer the time.

best wishes

Graham

[ANS thanks Graham Shirville for the above information]

/EX
SB SAT @ AMSAT $ANS-170.07
Small Payload Conference

AMSAT News Service Bulletin 170.07
From AMSAT HQ SILVER SPRING, MD.
June 19, 2005
To All RADIO AMATEURS
BID: $ANS-170.07

Small Payload Rideshare Conference

As part of the on-going effort to develop points of contact and relationships within the space industry, AMSAT Executive Vice President, Lee McLamb, KU4OS, attended the Small Payload Rideshare Conference sponsored by the National Reconnaissance Office (NRO), the USAF Space and Missile Systems Center/Space Test Program Office (SMC/STP), and the National Aeronautics and Space Administration/Goddard Spaceflight Center (NASA/GSFC). This annual conference is designed to address the issues related to access to space for small payloads, their potential benefits, and the key technologies for achieving affordable access to space. This year's conference was held 6-7 June 2005 in Denver, Colorado.

"This continues to be a very informative conference", reports Lee. He continued, "We are learning where there may be opportunities for mutually beneficial partnerships and how to better coordinate with with them".

Included in the conference were presentations on new small launch vehicles as well as several presentations on secondary payload adapters being developed for US launch vehicles. Lee said, "It will take work, but I see real potential for partnerships that will benefit the Eagle Project."

[ANS thanks Lee McLamb, KU4OS, for the above information]

73,
This week's ANS Editor,
Dee Interdonato, NB2F
NB2F at amsat dot org

Via the ans mailing list at AMSAT.ORG courtesy of AMSAT-NA.
To unsubscribe, send "unsubscribe ans" to Majordomo@amsat.org

282. ANS-170 AMSAT News Service Bulletins

Newsgroup: rec.radio.amateur.space
Date: 2005-06-22 12:17:16 UTC
From: JoAnne Maenpaa <wb9jej_no-spam@earthlink.net>
Message-ID: <gFcue.10353$eM6.6696@newsread3.news.atl.earthlink.net>
Source record: 1997

AMSAT NEWS SERVICE
ANS-170

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

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All of these are now available for download from the link at http://www.amsat.org.uk/iaru

It is anticipated that a short presentation of these exciting tools will be given during the AMSAT-UK Colloquium which will be taking place

at the University of Surrey between July 29-31st
http://www.uk.amsat.org/Colloquium/

cheers

Graham

[ANS thanks David Johnson, G4DPZ, for the above information]

/EX

SB SAT @ AMSAT $ANS-170.02
Send Your Name to Pluto!

AMSAT News Service Bulletin 170.02
From AMSAT HQ SILVER SPRING, MD.
June 19, 2005
To All RADIO AMATEURS
BID: $ANS-170.02

Join the New Horizons team as we unlock the secrets of Pluto, Charon
and the Kuiper Belt - sign up to send your name on the New Horizons
spacecraft! Names entered on the mission Web site will be recorded onto
a special compact disc, which the team plans to mount on the spacecraft
before its journey. After signing up you can print a personalized
participation certificate.

Visit here for the sign-up form:

http://pluto.jhuapl.edu/ecard/sendName_ecard_content.html

--
73 de JoAnne WB9JEJ

[ANS thanks Joanne, WB9JEJ, for the above information]

/EX

SB SAT @ AMSAT $ANS-170.03
AO-51 Configuration

AMSAT News Service Bulletin 170.03
From AMSAT HQ SILVER SPRING, MD.
June 19, 2005
To All RADIO AMATEURS
BID: $ANS-170.03

From the Satellite Software Development Team:

Due to restrictions in the Satellite, there can be no digi functionality
on Echo at this time.

Explanation:
Random noise from a receiver that is fed through the demodulator and
into the SCC (a sort of smart UART) will cause interrupts to be sent to
the CPU. With Echo having 4 or 5 open receivers the number of interrupts

was enough to cause the CPU difficulties in getting normal processing done in a timely fashion. Basically, the CPU was locked up trying to handle the interrupts. Echo is operating its SCC ports in a mode that will only pass AX.25 packets beginning with a certain character, which is called 'block' mode. This configuration solved the interrupt problem. For Echo, with the call sign being "PACB or PECHO", only packets beginning with the character 'P' can get through the SCC and generate a CPU interrupt.

A digi packet has the call sign of the destination station first, followed by the satellite (relay) call sign, and then the originator call sign. Therefore, the digi packet will not get through the SCC unless the destination station call sign begins wit htheletter'P'.

A great deal of effort was put into solving this problem. This solution is the only one at the present time that has worked well enough to implement in the Satellite.

[ANS thanks Mike, KE4AZN for the above information]

/EX

SB SAT @ AMSAT $ANS-170.04
AMSAT Journal Article Timing

AMSAT News Service Bulletin 170.04
>From AMSAT HQ SILVER SPRING, MD.
June 19, 2005
To All RADIO AMATEURS
BID: $ANS-170.04

Everyone,

Once again I must notify you that the May-June issue of the Journal will be late. I still am having some problems with the timing of article submissions. Here is the schedule that I want to adhere to:

Odd numbered months of the year - All articles submitted to me no later than mid-week 3 of the month.

Even numbered months of the year - Completed issue PageMaker files submitted to the printer during week 1

(January = month 1, February = month 2 and so on)

Once the Journal is in the hands of the printer my job is done for that issue unless the printer has questions of some kind or if he can't read a file I've sent or something. From that point it's their job to print it and get it out to you as soon as possible.

Unfortunately due to a lot of reasons (all of which are good) articles have not been arriving according to this schedule. This puts the Journal into your hands late. I sincerely apologize for this.

I want you to understand that I take the Journal very seriously and am trying to do the best job my amateurish hands can do. So please bear with me and I will continue to work hard to get the Journal out on time. I spend a great deal of time on the Journal putting it together and I'm trying daily to make it better. I also have a more-than-full-time job to hold down.

Potential authors - Please send me your contributions. I anxiously await them!

73,

Ed Long
WA4SWJ
Editor, The AMSAT Journal

[ANS thanks Ed Long, WA4SWJ, for the above information]

/EX

SB SAT @ AMSAT $ANS-170.05
ISS crew could be on the air for Field Day.
AMSAT News Service Bulletin 170.05
>From AMSAT HQ SILVER SPRING, MD.
June 19, 2005
To All RADIO AMATEURS
BID: $ANS-170.05

ISS crew could be on the air for Field Day.

International Space Station crew members John Phillips, KE5DRY, and Sergei Krikalev, U5MIR, may be on the air for ARRL Field Day, June 25-26. ISS Ham Radio Project Engineer Kenneth Ransom, N5VHO, at Johnson Space Center, has reviewed potential ISS pass times, and he says a few are favorable for US stations--although some will occur during the very early morning hours. Phillips and Krikalev will use the Amateur Radio on the International Space Station (ARISS) radio gear aboard the spacecraft.

''Hams on the ISS will try to be on for ARRL Field Day,'' Ransom said. ''The crew can make contacts anytime during the 1800 UTC June 25 to 1800 UTC June 26 period as time permits. Most activity will be over North and South America, but stations worldwide should be listening.''

Ransom says the pass times are only recommendations, and there is no guarantee that either Phillips or Krikalev will actually be on the air during any of them. Passes marked by asterisks (*) are recommended as desirable ones for voice contacts with Amateur Radio stations on the ground.

Saturday, June 25
1826-1834 Hawaii
1852-1902 Southern Chile Argentina

Sunday, June 26
0743-0804 Canada and NW US
0847-0901 Central and eastern Australia
0919-0938 Southern Canada and NE US
1020-1035 Western Australia
1053-1115 Alaska, SW Canada and eastern US
1110-1130 Caribbean, NE South America
1211-1223 Eastern Japan
1226-1248 Alaska, Western US
1246-1306 Central South America
1346-1359 Western Japan
1428-1442 Central Argentina
1606-1617 Southern Chile and Argentina
1715-1725 Hawaii

Phillips will operate as NA1SS and handing out ''1 Alfa ISS'' for a report. If Expedition 11 Commander Krikalev gets on the air too, he'll identify as RS0ISS and give the same exchange. In the past, crew members have operated from both the Phase 1 and Phase 2 ARISS stations using 2 meters and 70 cm.

The standard ISS voice frequencies for contacts in ITU Region 2 are 144.49 MHz up and 145.80 MHz down, FM.

If the astronauts can't get on the air to make voice QSOs, the RS0ISS packet station should be on and available for ground stations to work each other via the packet digipeater using ''ARISS'' as the alias for the call sign in UNPROTO mode. Frequencies are 145.99 MHz up and 145.80 MHz down.

ARRL Contest Branch Manager Dan Henderson, N1ND, notes that ISS voice or direct packet contacts with the ISS do not count for bonus satellite contact points because the ISS is not an ''Amateur Radio satellite'' as event rules specify. Packet contacts relayed via the ISS are valid.

''The ISS contacts do not count for satellite credit, since they are point-to-point, whereas the traditional satellite QSO is a relayed Earth-satellite-Earth two-way contact,'' he explained. Field Day has no specific rules relating to ARISS operation because there's no guarantee that the crew will be able to get on the air for the annual exercise.

During Field Day 2004, astronaut Mike Fincke, KE5AIT, operated NA1SS on 2 meters, while Expedition 9 Commander Gennady Padalka, RN3DT, was on the air from RS0ISS on 70 cm. Between them, they racked up more than five dozen QSOs.

[ANS thanks ARRL HQ for the above information]

/EX

SB SAT @ AMSAT $ANS-170.06
SSETI Announcement

AMSAT News Service Bulletin 170.06
>From AMSAT HQ SILVER SPRING, MD.
June 19, 2005
To All RADIO AMATEURS
BID: $ANS-170.06

The preliminary pre-launch keps for the Cosmos launch scheduled for August 25th have been announced.

This launch includes the SSETI Express spacecraft that will be carrying an amateur U/S FM transponder.

SSETI1
1 33001U 05066C 05237.44790000 -.00000001 00000-0 10000-4 0 16
2 33001 98.1900 134.5000 0000001 0.0000 0.0000 14.60830000 00013

These are only provisional and maybe refined nearer the launch date!

This satellite is sponsored by the Education Office of the European Space Agency and is the first in a series of student built satellite projects that are underway. Their next project "ESEO" is scheduled for 2007/8 launch into a GTO orbit.

For the SSETI Express programme ESA are very keen to have as many amateurs contributing received downlinked telemetry on 437MHz and 2.4GHz to a central database. They recognise that our "worldwide" network is a unique facility that is not otherwise available to them

A new website giving full details of the telemetry, how to decode it and how to forward it to the SSETI database is being currently being developed and initial information should be made available within the next four weeks.

In the meantime we can further report that the launch is expected to be broadcast live on this "free to air" satellite downlink.

Astra 1 G at 19.2 degrees east:

Transponder: 1.108
Reception frequency: 12551.50 MHz
Polarization: Vertical
Symbolrate: 22Msymb/s
FEC: 5/6
TS_ID: 1108
ON_ID: 1
Service Name: ESA
Service provider: ASTRA
Service_ID: 12140
TXT: none

As this only covers Europe we are also hoping to be able to stream the sound and video over the internet - more news will follow on this nearer the time.

best wishes

Graham

[ANS thanks Graham Shirville for the above information]

/EX
SB SAT @ AMSAT $ANS-170.07
Small Payload Conference

AMSAT News Service Bulletin 170.07
From AMSAT HQ SILVER SPRING, MD.
June 19, 2005
To All RADIO AMATEURS
BID: $ANS-170.07

Small Payload Rideshare Conference

As part of the on-going effort to develop points of contact and relationships within the space industry, AMSAT Executive Vice President, Lee McLamb, KU4OS, attended the Small Payload Rideshare Conference sponsored by the National Reconnaissance Office (NRO), the USAF Space and Missile Systems Center/Space Test Program Office (SMC/STP), and the National Aeronautics and Space Administration/Goddard Spaceflight Center (NASA/GSFC). This annual conference is designed to address the issues related to access to space for small payloads, their potential benefits, and the key technologies for achieving affordable access to space. This year's conference was held 6-7 June 2005 in Denver, Colorado.

"This continues to be a very informative conference", reports Lee. He continued, "We are learning where there may be opportunities for mutually beneficial partnerships and how to better coordinate with with them".

Included in the conference were presentations on new small launch vehicles as well as several presentations on secondary payload adapters being developed for US launch vehicles. Lee said, "It will take work, but I see real potential for partnerships that will benefit the Eagle Project."

[ANS thanks Lee McLamb, KU4OS, for the above information]

73,
This week's ANS Editor,
Dee Interdonato, NB2F
NB2F at amsat dot org

Via the ans mailing list at AMSAT.ORG courtesy of AMSAT-NA.
To unsubscribe, send "unsubscribe ans" to Majordomo@amsat.org

283. WSR-170 AMSAT Weekly Satellite Status

Newsgroup: rec.radio.amateur.space
Date: 2005-06-22 12:18:25 UTC
From: JoAnne Maenpaa <wb9jej_no-spam@earthlink.net>
Message-ID: <IGcue.10356$eM6.7849@newsread3.news.atl.earthlink.net>
Source record: 1996

```
This report is organized into 4 parts.
Part 1 - operational analog amateur satellites.
Part 2 - operational digital amateur satellites.
Part 3 - non - operational satellites
Part 4 - proposed satellites

SB SAT @ AMSAT <KB9MMC $ANS-170.S1
WSR 170 Part 1 06/19/2005

AMSAT NEWS SERVICE BULLETIN 170.S1 FROM AMSAT HQ
SILVER SPRING, MD, JUNE 19, 2005
TO ALL RADIO AMATEURS
BID: $ANS-170.S1

VO-52 HAMSAT
Catalog Number: ?
Launch Date: May 05,2005

Status: On orbit
Current Mode: U/V

Proposed frequencies:
-------------------
Indian transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacom : 145.940MHz continue carier signal

Dutch transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacon : 145.860MHz 12WPM with CW message

HAMSAT has been assigned the OSCAR designation VO-52.
[05152005]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - ON
FM REPEATER - ON

Analog voice downlink: 435.300 MHz FM
Analog voice uplink: 145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone
```

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

AO-51 Schedule of Modes for June 2005:

27 June
FM Repeater, V/U
Uplink: 145.920 MHz FM, 67 Hz PL Tone
Downlink 435.300 MHz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 MHz FM, 9k6 PBP Digital
Downlink: 435.150 MHz FM, 9k6 PBP Digital

All dates are UTC.

For further scheduled modes/tests, check out the Echo status page at:
http://www.amsat.org/amsat-new/echo/

Mike Kingery (KE4AZN) has released a upgrade to TimEcho to capture and
decode telemetry broadcast from Echo's digital downlink. TimeEcho
software and other Ao-51 ECHO information is available at:
http://web.infoave.net/~mkmk518/echo.htm

[ANS thanks Mike, KE4AZN for the above information]
[05292005]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz (67.0 Hz PL tone) (See below for operating
procedures)
Downlink: 436.795 MHz

There have been unconfirmed reports on the amsat-bb remailer that So-50 has
shifted downlink frequency as much as 5khz up. This both from Europe.

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary)

1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm
the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT
the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window
will reset the 10 minute timer.
[09122004]
=====

FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplink: 145.850 145.870 145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Please send the reception reports to lab2 'at' jarl.or.jp.
Please use the subject line: 'FO-29 reception report'.

Mineo, JE9PEL, has an FO-29 satellite telemetry analysis program that will automatically analyze all digital telemetry from the satellite (such as current, voltage and temperature). FO29CWTE is available at:
http://www.ne.jp/asahi/hamradio/je9pel/
[03132005]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

The latest information on AO-27 from control operator Michael Wyrick, N3UC (former N4USI), can be found at:
http://www.ao27.org

An AO-27 question-and-answer page is available on the AMSAT-NA web site, with updates by Ray, W2RS. The URL is:
http://www.amsat.org/amsat/intro/ao27faq.html

[ANS thanks John, K6YK, for this week's AO-27 report]
[08292004]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Semi-operational in sunlight.
Return to active status: June 21,2002

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A
145.975 to 145.925 MHz CW/USB Mode B
Beacon: 29.502 MHz, 145.972 MHz, 435.1 MHz, 2304.1 MHz

Emily, W0EEC has created a website to allow the users of AO-7 to record
contacts, observations and use of the satellite more effectively at:
http://www.emilyshouse.com/experthams/ao7/main.php
This includes the ability to log contacts.

Tim, K3TZ has written a program to decode AO-07 telemetry.
The program can be downloaded at:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

For more AO-7 info:
http://www.amsat.org/amsat/sats/n7hpr/ao7.html
[11142004]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Packet (APRS-style connections)
Digipeater: Active

The current Expedition 11 crew is:
Commander Sergei Krikalev
Flight Engineer John Phillips

Worldwide packet uplink: 145.990 MHz FM
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM
Doppler Shift is 10 KHz

Russian callsigns: RS0ISS, RZ3DZR
USA callsign: NA1SS
Packet station mailbox callsign: RS0ISS-11
Packet station keyboard callsign: RS0ISS-3
Digipeater callsign: ARISS

The ISS daily crew schedule can be found at:
http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is
NOT translated from Russian and posted.

More information is available at:
http://www.rac.ca/ariss
http://spaceflight.nasa.gov/station/reference/radio/

http://www.marexmg.org/fileshtml/unprotopage.html
http://www.issfanclub.com
http://oscar.dcarr.org/
[04242005]
NNNN
/EX

SB SAT @ AMSAT <KB9MMC $ANS-170.S2
WSR 170 Part 2 06/19/2005

AMSAT NEWS SERVICE BULLETIN 170.S2 FROM AMSAT HQ
SILVER SPRING, MD, JUNE 19, 2005
TO ALL RADIO AMATEURS
BID: $ANS-170.S2

AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - OFF
FM REPEATER - ON

Analog voice downlink: 435.300 MHz FM
Analog voice uplink: 145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

AO-51 Schedule of Modes forJune 2005:

27 June
FM Repeater, V/U
Uplink: 145.920 MHz FM, 67 Hz PL Tone
Downlink 435.300 MHz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 MHz FM, 9k6 PBP Digital
Downlink: 435.150 MHz FM, 9k6 PBP Digital

All dates are UTC.

For further scheduled modes/tests, check out the Echo status page at:
http://www.amsat.org/amsat-new/echo/

Mike Kingery (KE4AZN) has released a upgrade to TimEcho to capture and
decode telemetry broadcast from Echo's digital downlink. TimeEcho
software and other Ao-51 ECHO information is available at:
http://web.infoave.net/~mkmk518/echo.htm

[ANS thanks Mike, KE4AZN for the above information]
[05292005]
=====
GO-32 TECHSAT-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
(435.325 n/a - temperature problems)
Uplinks: 145.850, 145.890, 145.930 FM
1269.700, 1269.800, 1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[03132005]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink: 145.850 or 145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz
Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[05152005]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for
APRS users.

Uplink: 145.90 145.92 145.94 145.96 MHz FM
(using 1200-baud Manchester FSK)
Downlink: 437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon: 2401.1428 MHz
Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

A WOD collection of current graphics along with general information
and telemetry samples can be found at:
http://www.telecable.es/personales/ea1bcu
[05092004]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational?

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK).
approx. 10 days ON, 10 days OFF
Mode-S Beacon: 2401.500 MHz. ... OFF
UHFBeacon: 435.025 MHz. ... OFF

This from Clive, G3CWV:

There is a small chance that OSCAR-11 may have started transmitting
again between 08 June to 10 June.

The frequency is 145.826.

Any reception reports would be appreciated. Please reply direct to
Clive G3CWV (g3cwv@amsat.org), or post reports to AMSAT-BB.

[ANS thanks Clive, G3CWV for the above information]

More information on UO-11 OSCAR-11 can be found at:
http://www.users.zetnet.co.uk/clivew/
[06122005]
NNNN
/EX

SB SAT @ AMSAT <KB9MMC $ANS-170.S3
WSR 170 Part 3 06/19/2005

AMSAT NEWS SERVICE BULLETIN 170.S3 FROM AMSAT HQ
SILVER SPRING, MD, JUNE 19, 2005
TO ALL RADIO AMATEURS
BID: $ANS-170.S3

THE FOLLOWING ARE IN ORBIT BUT ARE
NON-OPERATIONAL AT THIS TIME:

POSAT-1 PO-28
Catalog Number: 22829
Launched : September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 435.075 MHz
435.275 MHz

Uplink: 145.925 MHz
145.975 MHz

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

More information of POSAT-1 can be found at:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
http://www.amsat.org/amsat/sats/n7hpr/po28.html
[08152004]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon: 145.810 MHz (unmodulated carrier)

AO-10 has been locked into a Mode-B, 70-cm uplink and
2-meter downlink for several years.

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Non-operational

Uplink: 145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink: 435.812 MHz SSB
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Alberto E. Zagni - I2KBD reports on 02/13/05
The spacecraft is in MBL (safe mode) and is trasmitting just 6 channels
of telemetry. Temperatures and voltage are nominal, but there seems to
be a problem with the onboard receiver, refusing to accept commands.
The spacecraft was launched in 1993, thus nearing 12 years in orbit...

Best regards
Alberto E. Zagni - I2KBD
ITAMSAT Mission Director

More information of IO-26 can be found at:

http://joshua.micronet.it/english/itamsat/itamsathome.html
http://www.amsat.org/amsat/sats/n7hpr/io26.html
www.itamsat.org

[02132005]
=====
RS-12 RADIO SPORT RS-12

Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon: 29.408 MHz
Robot: 29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB
Beacon: 145.860 MHz
Robot: 145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB

Beacon: 29.352 MHz (intermittent)
SSB meeting frequency: 29.380 MHz (unofficial)

John, KD6PAG reports on June 16, 2004 to ANS:
RS-15 beacon seemed to be back in the mode where it's a tone about 5 seconds
off and then 5 seconds on this morning.

ANS is looking for more confirmations of RS-15 coming back.

[ANS thanks John, KD6PAG for RS-15 information]
[06202004]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplink: 145.84 145.86 145.88 145.90 MHz FM
(using 1200-baud Manchester FSK)
CW downlink: 437.125 MHz
Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)
Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM
Broadcast Callsign: HLO1-11
BBS: HLO1-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a
non-operational status.
[05092004]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM (9600-baud FSK)
Downlink: 436.500 MHz FM
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink frequency (listed on the PanSat web site) 436.500 MHz

The satellite is not available for general uplink transmissions.

The Naval Postgraduate School developed PanSat. At the time of
launch, PanSat spread-spectrum digital transponders were to
be available to Amateur Radio operators along with software to utilize
this technology.

The satellite is still operating, however, the spread spectrum packet
radio portion never took place. The spacecraft is now beyond it's
initial 2-year mission life, but telemetry records are still being
downloaded.

For more information, visit the official PanSat web site at:
http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS has no further information]
[05232004]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlink: 437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA
web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplink V-band 145.840 - 145.990 MHz CW/LSB
U-band 435.550 - 435.800 MHz CW/LSB
L1-band 1269.250 - 1269.500 MHz CW/LSB
L2-band 1268.325 - 1268.575 MHz CW/LSB
S1-band 2400.350 - 2400.600 MHz CW/LSB
Downlink: S2-band 2401.225 - 2401.475 MHz CW/USB
K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon: 2401.323, 24,048.035
[05232004]

SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational

Uplink: to be released
Downlink: 437.075 MHz
Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz
Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Non-Operational?????

Uplink/downlink: 145.827 MHz 1200 baud AX.25 AFSK via W3ADO-1
Aux/Uplink: 435.250 MHz 9600 baud via PCSAT-2 (off)
APRS Downlink: 144.390 MHz (Region 2)

This from Bob, WB4APR:
PCsat returned to negative-power-budget mode on 16 Feb 2005 and is not
expect- ed to be restorable until the next full-sun period in the Fall
when the southern Sun can better illuminate the south facing panel.
Between now and then you are welcome to try to get a packet digipeated,
but this will usually only work during mid-day passes in the Northern
Hemisphere due to sun angles.

Question asked of Bob WB4APR recently on the amsat-bb:
Is it alive?? I was just looking at the pcsat.aprs.org page at Findu
and it shows a lot of stations recently (within the last day) digipeating
through it.

Bob's reply:
PCsat is always "alive", but can only muster enough
power to get out a complete packet when it is in
near mid-day sun in the Northern hemisphere the
higher the latitude the better in the summer.

Over the next 2 weeks PCsat is entering one of thoes
periods. The 20 or so stations you see on the LIVE
web page are probably unattended beacons. But
if u hear good packets on 145.825 from PCsat during
mid-day, go ahead and use it...

Fortunately it will be in 100% sun during FD, but
Unfortunately, all that sun is from the side and
misses the best solar panel. Experience has shown
it will be useless at that time.

PCSat is a 1200-baud APRS digipeater designed for use by stations using
hand-held or mobile transceivers. Downlinks feed a central web site at:
http://pcsat.aprs.org

The APRS-equipped PCSat was built by midshipmen from the U.S. Naval Academy
under the guidance of Bob Bruninga, WB4APR.
[05242005]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
callsign KE6QMD, as per the user service agreement located at the following
URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Semi-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

AO-49 (SAFIR-M) is a German amateur radio payload onboard the small German
scientific satellite "RUBIN-2".

AO-49 was built by the German amateur radio association "AATiS
e.V." (German
acronym for "Arbeitskreis Amateurfunk und Telekommunikation in der Schule",
which means: 'working group for amateur radio anand telecommunications in
schools'). AO-49 is designed as a "store and broadcast" system for APRS

based messages, dedicated for the use of schools in combination with the existing WX-Net and planned buoy experiments in Germany.

No transmissions detected since the 1st of February 2003! It appears AO-49 is not properly aligned to illuminate the solar panels. This should end soon. Due to its orbit, AO-49 will be in a phase without eclipses until 13Feb03.

Martin DG8UAU has written a small software program "SAFIR-M Decoder" to allow decoding of the received DATA0 frames. It is available at: http://amend.gmxhome.de in the section Aktuelles.

Details on AO-49 (SAFIR-M) can be found at:
http://amend.gmxhome.de

Information about AATiS e.V. is available at:
http://www.aatis.de
[05092004]
=====
CUTE-1
Catalog number: 27844
Launched: June 30,2003

Status: Operational?

Uplink: ?
Downlink: 436.8375 CW
437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan)

Fernando, LU1HKO, reports hearing Cute-1 on 03/06/2005 18:40 (LU Time) sending
CW telemetry.

CUTE 1 is a Japanese (Tokyo Institute of Technology) one kilogram nanosatellite that was launched by a Rokot rocket from Plesetsk at 14:15 UT on 30 June 2003. It carries a 100 mW beacon at 436.8375 MHz. Initial orbital parameters were period 101.4 min, apogee 831 km, perigee 819 km, and inclination 98.7?.

For further info about CUTE-1 goto:
http://lss.mes.titech.ac.jp/ssp/cubesat/operation/Schedule_e.html

ANS WSR is looking for more information about this satellite.
[03272005]
NNNN
/EX

SB SAT @ AMSAT <KB9MMC $ANS-170.S4
WSR 170 Part 4 06/19/2005

AMSAT NEWS SERVICE BULLETIN 170.S4 FROM AMSAT HQ
SILVER SPRING, MD, JUNE 19, 2005
TO ALL RADIO AMATEURS
BID: $ANS-170.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE
PROPOSED FOR LAUNCH AT THIS TIME:

UCISAT ?O-??
Catalog number:
Proposed Launch Date: October 31, 2005

Status: Under Construction

Downlink: Submission in Progress
Uplink: Submission in Progress
Callsign: Submission in Progress

This from Matt Bennett, KF6RTB, UCISAT Communications Team Member:

Our website is www.ucisat.net .This is a new website, however, and doesn't have the "Status" section active yet. Because of the growing interest in our project, I'll push our webmaster to create updates (hopefully) on a week-to-week basis. For now, the current status of the mission is as follows:

-Expected Launch Date: October 31st, 2005
-Frequency Allocation: Submission in Progress
-Construction Status: Sub-Assembly
[WSR to thank Matt Bennett, KF6RTB, for this week's report.]
[01302005]
=====
SSETI ?O-??
Catalog Number:
Proposed Launch Date: Early 2005

Status: Under Construction

During the last week, the completed modules have been fitted to the spaceframe and the wiring harness and integration completed. The satellite was moved on Wednesday to an anechoic chamber for EMC testing to ensure that the emissions from the satellites electronics, the 3W UHF transmitter and the S Band TX meet the spectral requirements of the launch agency and SSTL.

Several new pictures showing the rapid progress over the last 2 weeks have been uploaded to the SSETI Website. These include detailed shots of the S Band unit now wired to the antennas, cold gas propulsion and some taken inside the anechoic chamber.
http://sseti.gte.tuwien.ac.at/WSW4/express5.php

[ANS thanks David, G0MRF for the above information]

Looking at the website for the SSETI Express webcam
http://sseti.gte.tuwien.ac.at/WSW4/webcam.htm

[04102005]
=====
PCSAT2 ?0-??
Catalog Number:
Proposed Launch Date: May 2005

PCSAT2, which had previously been stowed in the Space Shuttle Discovery, arrived at Launch Complex 39B on 07 April 2005. PCSAT2 is now standing by ready to be launched on the first Space Shuttle return-to-flight mission.

PCSAT2 will use the same dual redundant AX.25 command and control system as used on PCsat (NO-44) offering 8 on/off commands, 5 telemetry channels and a serial port for the solar cell experiment telemetry. It also supports the Digital Comms Relay support of the PCsat/APRS mission. The packet uplink is on 145.825 MHz and the default downlinks are in the 435 MHz band to avoid any possible interference with existing ARISS missions. PCSAT2 will have quad redundant transmit inhibits for EVA safety issues, thus, it is also easy to turn off to avoid any issues with other UHF ARISS experiments that may be activated in the future. Also, the mission lifetime of PCSAT2 is only 1 year, because it is a sample-return mission, thus terminating any long term conflicts in spectrum management.

The PCSAT2 mission is intended as an opportunity to augment existing ARISS communications experiments with an external autonomous communications payload. In this regard, it has several potential uses:

* A UI-Digipeater to help ease congestion on the currently shared ARISS PMS (Packet Mail system)

* A PSK-31 transponder for multi-user communications to improve accessibility for schools and ARISS outreach programs.

* An FM Voice repeater for full duplex crew communications to facilitate crew-to-school ARISS contacts.

* Routine Telemetry on the spacecraft systems

For more information and pictures visit the PCSAT2 website at http://www.ew.usna.edu/~bruninga/pcsat2.html

[ANS thanks Bob, WB4APR for the above information]
[04102005}
=====
PHASE 3E ?O-??
Catalog Number:
Proposed Launch Date: Early 2006

Status: Under Construction

The AMSAT-Phase 3E satellite (P3E) is dedicated as communication and scientific platform for a highly elliptical orbit around Earth. The spacecraft will be created in a joint process together with the P5A Mars mission by an international team under leadership of AMSAT-DL and continues the successful series of AMSAT-Phase 3 satellites. Additionally the spacecraft will be a test bench for technology developped for the Mars mission. The main task of P3E is to act as communication platform for radio amateurs worldwide. A launch is planned in the period 2004 to 2006.

For the latest project status update please visit the AMSAT-DL
P3-E web page:
http://www.amsat-dl.org/p3e/
[03272005]
=====
CP1 ?o-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N6CP
Proposed Transmit Frequency: 436.845
[03272005]
=====
CP2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.325
[03272005]
=====
HAUSAT1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: D90HP
Proposed Transmit Frequency: 437.465
[03272005]
=====
ICE Cube 1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: W2CXM
Proposed Transmit Frequency: 437.305
[03272005]
=====
ICE Cube 2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N2VR
Proposed Transmit Frequency: 437.425
[03272005]
=====
ION ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.505
[03272005]
=====

KUTEsat ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: KC0RMW
Proposed Transmit Frequency: 437.385
[03272005]
=====
MEROPE ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: K7MSU-1
Proposed Transmit Frequency: 145.980
[03272005]
=====
nCUBE1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
2407.25
[03272005]
=====
RINCON ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
437.345
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SEEDS ?O-??
Catalog Number:

Proposed Launch Date: Mid May 2005

Proposed Callsign: JQ1YGU
Proposed Transmit Frequency: 437.485
[03272005]
=====
Mea Huaka ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.405
[03272005]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satelite Report Editor is James K. Darrow, KB9MMC.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the
memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen,
G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

_____
HamSat mailing list
HamSat@mailman.qth.net
http://mailman.qth.net/mailman/listinfo/hamsat

284. Field Day 2005

Newsgroup: rec.radio.amateur.space
Date: 2005-06-25 15:28:07 UTC
From: Mike <Mike@nowhere.net>
Message-ID: <bKeve.106379$on1.24208@clgrps13>
Source record: 1998

Hope to see everyone on the air. I will be working with my club http://narc.net and our call will be VE6RAC from Edmonton Alberta. We intend on doing all bands & modes including SSB, CW, RTTY and will even do FM on 6m & above for folks with only those rigs. Will attempt a QSO with some satellite. Best wishes and good luck on Field Day 2005!

73 de Mike VE6HMG

285. Pizza, New Great-Circle Plotting Program

Newsgroup: rec.radio.amateur.space
Date: 2005-06-25 22:12:13 UTC
From: K7JEB <k7jeb.remove.this@qsl.net>
Message-ID: <90lrb1p949i59dv4la1bdm5lnid1tk74tq@4ax.com>
Source record: 1999
Cross-posted to:
rec.radio.amateur.antenna;,rec.radio.amateur.boatanchors;,rec.radio.amateur.dx;,rec.radio.amateur.space;,rec.radio.shortwave

A friend of mine, Jim Tonne, WB6BLD, has written a much-improved, Windows version of a classic great-circle plotting program and is providing it to the Amateur Radio community FOR FREE.

If you are a DX'er and need an antenna-bearing aid or just like to poke around on the earth's geography, this program will be of interest to you.

It calculates the bearing and distance from a Home location to a Target location anywhere in the world and displays this result on both azimuthal (polar) and rectangular maps. Both the Home and Target locations may be selected by mouse designations on the rectangular world map or chosen from a menu of cities, countries and callsign areas. The Maidenhead grid system is fully supported on both data-entry and readout. Sun and terminator positions are plotted on both maps in real time from the host computer clock, enabled by a menu selection. Both maps use an accurate, high-resolution, up-to-date geographic database. The azimuth map may be plotted at five different resolutions, allowing an optimum mix of accuracy and computation speed. Additionally, the azimuth plot may be repeatedly zoomed-in or out by a factor of 2 to place both Home and Target on-screen. Bearing and range overlays are provided in the azimuth plot, making it suitable for a printed-out beam-heading chart.

Both the polar and rectangular plots are printed to the standard Windows printer, no special drivers are needed. System requirements are a Pentium processor (P4 recommended), Windows 98, ME, 2000, XP, and 4.8 Megabytes of free disk space.

The download installation file size is 2.5 Megabytes. The program download URL is:

http://tonnesoftware.com/pizzadownload.html

There are other programs out there that perform this same calculation, but none with the combination of features Pizza offers.

Oh, yeah, that name. Bring up an azimuth plot of the entire world and it hits you in the eye like a big pizza pie -- that's amorï¿½!

Jim, K7JEB

286. ISS Field Day

Newsgroup: rec.radio.amateur.space
Date: 2005-06-26 11:13:25 UTC
From: Kenneth PierceJr <nu3a@verizon.net>
Message-ID: <p5wve.3033$Bn6.2004@trndny08>
Source record: 2000

Heard packet downlink on 145.80 on two passes over Delaware but no voice.
Has anyone heard any voice activity from ISS during field day?

287. Re: Pizza, New Great-Circle Plotting Program

Newsgroup: rec.radio.amateur.space
Date: 2005-06-26 13:03:12 UTC
From: CAM <w5dxp@arrl.net>
Message-ID: <1119790992.821564.264980@z14g2000cwz.googlegroups.com>
Source record: 2001
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shortwave

K7JEB wrote:
> Oh, yeah, that name. Bring up an azimuth plot of the
> entire world and it hits you in the eye like a big
> pizza pie -- that's amoré!

Just don't expect to find it by doing a web search
for "pizza". :-)
--
73, Cecil http://www.qsl.net/w5dxp

288. Re: Pizza, New Great-Circle Plotting Program

Newsgroup: rec.radio.amateur.space
Date: 2005-06-26 23:07:37 UTC
From: FDR <_remove_spam_block_rzitka@hotmail.com>
Message-ID: <ZyGve.40032$fp6.5475@twister.nyroc.rr.com>
Source record: 2002
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shortwave

"K7JEB" <k7jeb.remove.this@qsl.net> wrote in message
news:90lrb1p949i59dv4la1bdm5lnid1tk74tq@4ax.com...
>
>
> A friend of mine, Jim Tonne, WB6BLD, has written a
> much-improved, Windows version of a classic great-circle
> plotting program and is providing it to the Amateur Radio
> community FOR FREE.
>
> If you are a DX'er and need an antenna-bearing aid or just
> like to poke around on the earth's geography, this program
> will be of interest to you.
>
> It calculates the bearing and distance from a Home location
> to a Target location anywhere in the world and displays this
> result on both azimuthal (polar) and rectangular maps. Both
> the Home and Target locations may be selected by mouse
> designations on the rectangular world map or chosen from a
> menu of cities, countries and callsign areas.

So this tells you how to get from Home Depot to a Target store? Cool.

289. Re: Pizza, New Great-Circle Plotting Program

Newsgroup: rec.radio.amateur.space
Date: 2005-06-27 05:40:35 UTC
From: K7JEB <k7jeb.remove.this@qsl.net>
Message-ID: <134vb19lsaj3a9bt58shjtn564smv3elsi@4ax.com>
Source record: 2003
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shortwave

On 26 Jun 2005 06:03:12 -0700, "CAM" <w5dxp@arrl.net> wrote:

>K7JEB wrote:
>> Oh, yeah, that name. Bring up an azimuth plot of the
>> entire world and it hits you in the eye like a big
>> pizza pie -- that's amorï¿½!

>Just don't expect to find it by doing a web search
>for "pizza". :-)

'pizza + great + circle' works well, though.

k7jeb

290. Re: Pizza, New Great-Circle Plotting Program

Newsgroup: rec.radio.amateur.space
Date: 2005-06-27 12:58:53 UTC
From: W8LNA <W8LNA@arrl.net>
Message-ID: <hKSve.298$pg.197@news01.roc.ny>
Source record: 2004
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.shortwave

K7JEB wrote:
> On 26 Jun 2005 06:03:12 -0700, "CAM" <w5dxp@arrl.net> wrote:
>
>
>>K7JEB wrote:
>>
>>>Oh, yeah, that name. Bring up an azimuth plot of the
>>>entire world and it hits you in the eye like a big
>>>pizza pie -- that's amorï¿½!
>
>
>>Just don't expect to find it by doing a web search
>>for "pizza". :-)
>
>
> 'pizza + great + circle' works well, though.
>
> k7jeb

Or you could go here:
http://tonnesoftware.com/pizza.html

291. ANS-177 AMSAT Weekly News Bulletins

Newsgroup: rec.radio.amateur.space
Date: 2005-06-28 12:49:20 UTC
From: JoAnne Maenpaa <wb9jej_no-spam@earthlink.net>
Message-ID: <kHbwe.12926$pa3.2860@newsread2.news.atl.earthlink.net>
Source record: 2005

AMSAT NEWS SERVICE
ANS-177

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:

* ARISS Status - June 20, 2005
* One Year Anniversary of Echo
* Symposium Registration Now Online
* SSETI Express to Leave Cleanroom
* 2006 Slate of BOD Candidates
* AMSAT Awards

SB SAT @ AMSAT $ANS-177.01
ARISS Status - June 20, 2005

AMSAT News Service Bulletin 177.01
From AMSAT HQ SILVER SPRING, MD.
June 26, 2005
To All RADIO AMATEURS
BID: $ANS-177.01

1. Canadian School Contact Successful

On Friday, June 17, fifteen students from Ecole De la Source, an elementary school in Mascouche, Quebec, Canada, spoke to John Phillips, KE5DRY, via ham radio. Fifteen questions were asked of the astronaut as an audience of approximately 400 students, parents, and dignitaries, assembled in the gymnasium, watched via a video link. Two national television stations and one newspaper covered the event.

2. Upcoming School Contacts

The Mayborn Museum at Baylor University in Waco, Texas has been approved for a contact via the telebridge station WH6PN in Hawaii. It will take place on Monday, June 27 at 16:05 UTC.

3. Article on Australian School Contact

On Thursday, June 2, students from Brigidine College in Sydney, New South Wales, Australia spoke to John Phillips, KE5DRY. An article was written and posted on the school's website. See:
http://www.bcr.randwick.syd.catholic.edu.au/home/space/

4. SuitSat Educational Project Status

Approximately 200 pieces of artwork have been submitted for the SuitSat DVDs. It has been noted that Space Camp Turkey, a participant of two ARISS contacts in the past, sent in their own artwork, taking advantage of yet another ARISS opportunity.

5. ARISS Software

Sergey Samburov sent to Kenneth Ransom a CD containing Kenwood operations, SSTV instructions, and other software programs. The U.S. team will review the contents and provide updates for the software, as needed. Once finalized, the CD will be sent to the ISS on a future Progress flight.

Mark Steiner contacted QRZ and received an update to the callsign database. The new database will be shipped to Houston along with the SuitSat Educational Project CDs, and will be included in the Progress 19P manifest.

6. News of SuitSat Spreads

The ARRL has been fielding questions from reporters about SuitSat, and has prepared a story for their own Web site.

On June 15, Space.com ran an article entitled, "Old Spacesuit, New Satellite." See:
http://www.space.com/astronotes/astronotes.html

On June 16, WFMY News 2 also ran an article on SuitSat. See:
http://www.wfmynews2.com/news/technology/tech_article.aspx?storyid=42975

ARRL's own article, "Fall Launch Viewed for 'SuitSat' as ARISS-US Delivers Hardware," can be found at:
http://www.arrl.org/news/stories/2005/06/17/2/?nc=1

7. Astronaut Training

Astronaut John Grunsfeld is tentatively scheduled to attend an ARISS operations overview session on Friday, July 8. Grunsfeld is the backup for Expedition 13.

8. ARRL Article on ISS Participation in Field Day

John Phillips, KE5DRY, and Sergei Krikalev, U5MIR, may participate in Field Day on June 25 - 26. The ARRL article, "ISS Astronauts Could Be on the Air for Field Day!" includes pass times when the Expedition 11 crew may be available for a contact. See:
http://www.arrl.org/news/stories/2005/06/15/2/?nc=1

9. ARRL Article on John Phillips

Astronaut John Phillips spoke to members of Congress about what living on the ISS means in terms of future exploration plans. On June 15, the ARRL covered this story in the article, "Ham-Astronaut testifies before Congress from space." See:
http://www.arrl.org/

[ANS thanks Carol, KB3LKI for the above information]

/EX

SB SAT @ AMSAT $ANS-177.02
One Year Anniversary of Echo

AMSAT News Service Bulletin 177.02
From AMSAT HQ SILVER SPRING, MD.
June 26, 2005
To All RADIO AMATEURS
BID: $ANS-177.02

June 29th will mark the 1-year anniversary of the Launch of Echo. On June 29, 2004, Echo, now AO-51, was launched from Baikonur, Kazakhstan, on top of a Dnepr launch vehicle. Echo was one of 8 satellites which were placed into Sun Synchronous Orbit during this launch. After approximately a month of commissioning and testing, the satellite was placed into amateur radio service.

Much more information about the history of Echo is available in Gould Smith's (WA4SXM) book, "AO-51 Development, Operations, and Specifications," available from AMSAT-NA.

I hope everyone has enjoyed the first year of Echo's in-orbit life, the wide variety of modes and experiments that have been operated to date on the satellite, and are looking forward to many more opportunities with Echo in the years ahead. If you use and enjoy Echo please consider joining AMSAT-NA, or your Country's AMSAT organization. It is one way that we can continue to do what we enjoy; make contacts via Amateur Radio Satellites.

[ANS thanks Mike, KE4AZN for the above information]

/EX

SB SAT @ AMSAT $ANS-177.03
Symposium Registration Now Online

AMSAT News Service Bulletin 177.03
From AMSAT HQ SILVER SPRING, MD.
June 26, 2005
To All RADIO AMATEURS
BID: $ANS-177.03

Registration for the 2005 AMSAT Space Symposium is now available on-line. The Symposium will be held October 7-9 at the Holiday Inn Holidome in downtown Lafayette, LA. Information can be found on the Symposium web page at: http://www.amsat.org/amsat-new/symposium/

In addition to downloading the registration form, for the first time attendees can now register online through the AMSAT store. Registration forms will also be mailed out with the annual ballots for the AMSAT board of directors. Please see the AMSAT Store registration for more information: http://www.amsat-na.com/SymposiumReg.php

Registration for the Annual Banquet, the Friday Night Shrimp Boil and the Sunday Swamp Tour can all be done at the time you register for the Symposium.

[ANS thanks Emily, W0EEC for the above information]

/EX

SB SAT @ AMSAT $ANS-177.04
SSETI Express to Leave Cleanroom

AMSAT News Service Bulletin 177.04
From AMSAT HQ SILVER SPRING, MD.
June 26, 2005
To All RADIO AMATEURS
BID: $ANS-177.04

The SSETI Express flight model is expected to be fully completed before the end of this week and will then be taken out from the cleanroom and packed for dispatch to the launch site at Plesestk. This means that the webcam pictures at http://sseti.gte.tuwien.ac.at/WSW4/webcam.htm will be almost the last ones available before launch. Presently they are updated every 5 minutes.

SSETI Express is scheduled for launch on Aug 25th and after initial telemetry and telecommand operations is expected to provide a U/S FM transponder in the amateur satellite service.

More details of the launch, the telemetry formats, frequencies and available software will be made available over the forthcoming days/weeks prior to launch.

ESA (and AMSAT-UK) really hope that as many amateurs around the world as possible will be willing to download the telemetry (9k6 on 437 MHz and 38k4 on 2.4 GHz), decode it and forward it to the SSETI Control Station over the internet. This opportunity to participate will enable us to show that the amateur satellite service groundstation network is a viable system for such short term projects. This in turn will encourage them and possibly other launch agencies to actively consider incorporating amateur transponder equipment in their future projects!

[ANS thanks Graham, G3VZV for the above information]

/EX

SB SAT @ AMSAT $ANS-177.05
2006 Slate of BOD Candidates

AMSAT News Service Bulletin 177.05
From AMSAT HQ SILVER SPRING, MD.
June 26, 2005
To All RADIO AMATEURS
BID: $ANS-177.05

Nominations for the position of Director for AMSAT, Inc. closed on June 15th. The list of qualified candidates are:

Barry Baines WD4ASW
Emily Clark W0EEC
Richard M. Hambly W2GPS
Bob McGwier N4HY
Gunther Meisse W8GSM
Bruce Paige KK5DO
Lee McLamb KU4OS
Greg Wycoff N0ZHE

Ballot cards will be mailed to members on or about July 15th, and are due in the AMSAT Office no later than September 15th.

[ANS thanks Steve, W4EPI for the above information]

/EX

SB SAT @ AMSAT $ANS-177.06
AMSAT Awards

AMSAT News Service Bulletin 177.06
From AMSAT HQ SILVER SPRING, MD.
June 26, 2005
To All RADIO AMATEURS
BID: $ANS-177.06

This week, congrats go out to all of the following. All one of them.

David Bird, KC7USS, 51 on 51 Award #28

Who will earn 51 on 51 Award #100? Remember, this award is only available until December 31, 2005.

To see all the awards visit http://www.amsat.org or http://www.amsatnet.com

[ANS thanks Bruce, KK5DO for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Al Marote, WA1LBG
wa1lbg at amsat dot org

Via the ans mailing list at AMSAT.ORG courtesy of AMSAT-NA.
To unsubscribe, send "unsubscribe ans" to Majordomo@amsat.org

292. WSR-177 AMSAT Weekly Satellite Status Report

Newsgroup: rec.radio.amateur.space
Date: 2005-06-28 12:50:21 UTC
From: JoAnne Maenpaa <wb9jej_no-spam@earthlink.net>
Message-ID: <hIbwe.12927$pa3.4082@newsread2.news.atl.earthlink.net>
Source record: 2006

```
This report is organized into 4 parts.
Part 1 - operational analog amateur satellites.
Part 2 - operational digital amateur satellites.
Part 3 - non - operational satellites
Part 4 - proposed satellites

SB SAT @ AMSAT <KB9MMC $ANS-177.S1
WSR 177 Part 1 06/26/2005

AMSAT NEWS SERVICE BULLETIN 177.S1 FROM AMSAT HQ
SILVER SPRING, MD, JUNE 26, 2005
TO ALL RADIO AMATEURS
BID: $ANS-177.S1

VO-52 HAMSAT
Catalog Number: 28650
Launch Date: May 05,2005

Status: On orbit
Current Mode: U/V

Proposed frequencies:
-------------------
Indian transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacom : 145.940MHz continue carier signal

Dutch transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacon : 145.860MHz 12WPM with CW message

HAMSAT has been assigned the OSCAR designation VO-52.
[06192005]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - ON
FM REPEATER - ON

Analog voice downlink: 435.300 MHz FM
Analog voice uplink: 145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone
```

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

AO-51 Schedule of Modes for June 2005:

27 June
FM Repeater, V/U
Uplink: 145.920 MHz FM, 67 Hz PL Tone
Downlink 435.300 MHz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 MHz FM, 9k6 PBP Digital
Downlink: 435.150 MHz FM, 9k6 PBP Digital

All dates are UTC.

From the Satellite Software Development Team:

Due to restrictions in the Satellite, there can be no digi functionality
on Echo at this time.

Explanation:
Random noise from a receiver that is fed through the demodulator and
into the SCC (a sort of smart UART) will cause interrupts to be sent to
the CPU. With Echo having 4 or 5 open receivers the number of interrupts
was enough to cause the CPU difficulties in getting normal processing
done in a timely fashion. Basically, the CPU was locked up trying to
handle the interrupts. Echo is operating its SCC ports in a mode that
will only pass AX.25 packets beginning with a certain character, which
is called 'block' mode. This configuration solved the interrupt
problem. For Echo, with the call sign being "PACB or PECHO", only
packets beginning with the character 'P' can get through the SCC and
generate a CPU interrupt.

A digi packet has the call sign of the destination station first,
followed by the satellite (relay) call sign, and then the originator
call sign. Therefore, the digi packet will not get through the SCC
unless the destination station call sign begins wit htheletter'P'.

A great deal of effort was put into solving this problem. This solution
is the only one at the present time that has worked well enough to
implement in the Satellite.

[ANS thanks Mike, KE4AZN for the above information]

For further scheduled modes/tests, check out the Echo status page at:
http://www.amsat.org/amsat-new/echo/

Mike Kingery (KE4AZN) has released a upgrade to TimEcho to capture and
decode telemetry broadcast from Echo's digital downlink. TimeEcho
software and other Ao-51 ECHO information is available at:

http://web.infoave.net/~mkmk518/echo.htm

[ANS thanks Mike, KE4AZN for the above information]
[06262005]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz (67.0 Hz PL tone) (See below for operating
procedures)
Downlink: 436.795 MHz

There have been unconfirmed reports on the amsat-bb remailer that So-50 has
shifted downlink frequency as much as 5khz up. This both from Europe.

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary)

1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm
the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT
the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window
will reset the 10 minute timer.
[09122004]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplink: 145.850 145.870 145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Please send the reception reports to lab2 'at' jarl.or.jp.
Please use the subject line: 'FO-29 reception report'.

Mineo, JE9PEL, has an FO-29 satellite telemetry analysis program that will
automatically analyze all digital telemetry from the satellite (such as
current, voltage and temperature). FO29CWTE is available at:
http://www.ne.jp/asahi/hamradio/je9pel/
[03132005]

=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

The latest information on AO-27 from control operator Michael Wyrick,
N3UC (former N4USI), can be found at:
http://www.ao27.org

An AO-27 question-and-answer page is available on the AMSAT-NA web
site, with updates by Ray, W2RS. The URL is:
http://www.amsat.org/amsat/intro/ao27faq.html

[ANS thanks John, K6YK, for this week's AO-27 report]
[08292004]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Semi-operational in sunlight.
Return to active status: June 21,2002

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A
145.975 to 145.925 MHz CW/USB Mode B
Beacon: 29.502 MHz, 145.972 MHz, 435.1 MHz, 2304.1 MHz

Emily, W0EEC has created a website to allow the users of AO-7 to record
contacts, observations and use of the satellite more effectively at:
http://www.emilyshouse.com/experthams/ao7/main.php
This includes the ability to log contacts.

Tim, K3TZ has written a program to decode AO-07 telemetry.
The program can be downloaded at:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

For more AO-7 info:
http://www.amsat.org/amsat/sats/n7hpr/ao7.html
[11142004]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Packet (APRS-style connections)
Digipeater: Active

The current Expedition 11 crew is:
Commander Sergei Krikalev
Flight Engineer John Phillips

Worldwide packet uplink: 145.990 MHz FM
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM
Doppler Shift is 10 KHz

Russian callsigns: RS0ISS, RZ3DZR
USA callsign: NA1SS
Packet station mailbox callsign: RS0ISS-11
Packet station keyboard callsign: RS0ISS-3
Digipeater callsign: ARISS

The ISS daily crew schedule can be found at:
http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is
NOT translated from Russian and posted.

More information is available at:
http://www.rac.ca/ariss
http://spaceflight.nasa.gov/station/reference/radio/
http://www.marexmg.org/fileshtml/unprotopage.html
http://www.issfanclub.com
http://oscar.dcarr.org/
[04242005]
NNNN
/EX

SB SAT @ AMSAT <KB9MMC $ANS-177.S2
WSR 177 Part 2 06/26/2005

AMSAT NEWS SERVICE BULLETIN 177.S2 FROM AMSAT HQ
SILVER SPRING, MD, JUNE 26, 2005
TO ALL RADIO AMATEURS
BID: $ANS-177.S2

AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - OFF
FM REPEATER - ON

Analog voice downlink: 435.300 MHz FM
Analog voice uplink: 145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

AO-51 Schedule of Modes forJune 2005:

27 June
FM Repeater, V/U
Uplink: 145.920 MHz FM, 67 Hz PL Tone
Downlink 435.300 MHz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 MHz FM, 9k6 PBP Digital
Downlink: 435.150 MHz FM, 9k6 PBP Digital

All dates are UTC.

From the Satellite Software Development Team:

Due to restrictions in the Satellite, there can be no digi functionality
on Echo at this time.

Explanation:
Random noise from a receiver that is fed through the demodulator and
into the SCC (a sort of smart UART) will cause interrupts to be sent to
the CPU. With Echo having 4 or 5 open receivers the number of interrupts
was enough to cause the CPU difficulties in getting normal processing
done in a timely fashion. Basically, the CPU was locked up trying to
handle the interrupts. Echo is operating its SCC ports in a mode that
will only pass AX.25 packets beginning with a certain character, which
is called 'block' mode. This configuration solved the interrupt
problem. For Echo, with the call sign being "PACB or PECHO", only
packets beginning with the character 'P' can get through the SCC and
generate a CPU interrupt.

A digi packet has the call sign of the destination station first,
followed by the satellite (relay) call sign, and then the originator
call sign. Therefore, the digi packet will not get through the SCC
unless the destination station call sign begins wit htheletter'P'.

A great deal of effort was put into solving this problem. This solution
is the only one at the present time that has worked well enough to
implement in the Satellite.

[ANS thanks Mike, KE4AZN for the above information]

For further scheduled modes/tests, check out the Echo status page at:
http://www.amsat.org/amsat-new/echo/

Mike Kingery (KE4AZN) has released a upgrade to TimEcho to capture and
decode telemetry broadcast from Echo's digital downlink. TimeEcho
software and other Ao-51 ECHO information is available at:

http://web.infoave.net/~mkmk518/echo.htm

[ANS thanks Mike, KE4AZN for the above information]
[06262005]
=====
GO-32 TECHSAT-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
(435.325 n/a - temperature problems)
Uplinks: 145.850, 145.890, 145.930 FM
1269.700, 1269.800, 1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[03132005]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink: 145.850 or 145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz
Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[05152005]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for
APRS users.

Uplink: 145.90 145.92 145.94 145.96 MHz FM
(using 1200-baud Manchester FSK)
Downlink: 437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon: 2401.1428 MHz

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

A WOD collection of current graphics along with general information
and telemetry samples can be found at:
http://www.telecable.es/personales/ea1bcu
[05092004]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational?

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK).
approx. 10 days ON, 10 days OFF
Mode-S Beacon: 2401.500 MHz. ... OFF
UHFBeacon: 435.025 MHz. ... OFF

This from Clive, G3CWV:

There is a small chance that OSCAR-11 may have started transmitting
again between 08 June to 10 June.

The frequency is 145.826.

Any reception reports would be appreciated. Please reply direct to
Clive G3CWV (g3cwv@amsat.org), or post reports to AMSAT-BB.

[ANS thanks Clive, G3CWV for the above information]

More information on UO-11 OSCAR-11 can be found at:
http://www.users.zetnet.co.uk/clivew/
[06122005]
NNNN
/EX

SB SAT @ AMSAT <KB9MMC $ANS-177.S3
WSR 177 Part 3 06/26/2005

AMSAT NEWS SERVICE BULLETIN 177.S3 FROM AMSAT HQ
SILVER SPRING, MD, JUNE 26, 2005
TO ALL RADIO AMATEURS
BID: $ANS-177.S3

THE FOLLOWING ARE IN ORBIT BUT ARE
NON-OPERATIONAL AT THIS TIME:

POSAT-1 PO-28
Catalog Number: 22829
Launched : September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 435.075 MHz
435.275 MHz

Uplink: 145.925 MHz
145.975 MHz

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

More information of POSAT-1 can be found at:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
http://www.amsat.org/amsat/sats/n7hpr/po28.html
[08152004]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon: 145.810 MHz (unmodulated carrier)

AO-10 has been locked into a Mode-B, 70-cm uplink and
2-meter downlink for several years.

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Non-operational

Uplink: 145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink: 435.812 MHz SSB
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Alberto E. Zagni - I2KBD reports on 02/13/05
The spacecraft is in MBL (safe mode) and is trasmitting just 6 channels
of telemetry. Temperatures and voltage are nominal, but there seems to
be a problem with the onboard receiver, refusing to accept commands.
The spacecraft was launched in 1993, thus nearing 12 years in orbit...

Best regards
Alberto E. Zagni - I2KBD
ITAMSAT Mission Director

More information of IO-26 can be found at:

http://joshua.micronet.it/english/itamsat/itamsathome.html
http://www.amsat.org/amsat/sats/n7hpr/io26.html
www.itamsat.org

[02132005]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon: 29.408 MHz
Robot: 29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB
Beacon: 145.860 MHz
Robot: 145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439

Launch Date: December 26, 1994

Status: Non-operational?

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB
Beacon: 29.352 MHz (intermittent)
SSB meeting frequency: 29.380 MHz (unofficial)

John, KD6PAG reports on June 16, 2004 to ANS:
RS-15 beacon seemed to be back in the mode where it's a tone about 5 seconds
off and then 5 seconds on this morning.

ANS is looking for more confirmations of RS-15 coming back.

[ANS thanks John, KD6PAG for RS-15 information]
[06202004]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplink: 145.84 145.86 145.88 145.90 MHz FM
(using 1200-baud Manchester FSK)
CW downlink: 437.125 MHz
Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)
Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM
Broadcast Callsign: HLO1-11
BBS: HLO1-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a
non-operational status.
[05092004]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM (9600-baud FSK)
Downlink: 436.500 MHz FM
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink frequency (listed on the PanSat web site) 436.500 MHz

The satellite is not available for general uplink transmissions.

The Naval Postgraduate School developed PanSat. At the time of
launch, PanSat spread-spectrum digital transponders were to
be available to Amateur Radio operators along with software to utilize
this technology.

The satellite is still operating, however, the spread spectrum packet
radio portion never took place. The spacecraft is now beyond it's
initial 2-year mission life, but telemetry records are still being
downloaded.

For more information, visit the official PanSat web site at:
http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS has no further information]
[05232004]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlink: 437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA
web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplink V-band 145.840 - 145.990 MHz CW/LSB
U-band 435.550 - 435.800 MHz CW/LSB
L1-band 1269.250 - 1269.500 MHz CW/LSB
L2-band 1268.325 - 1268.575 MHz CW/LSB
S1-band 2400.350 - 2400.600 MHz CW/LSB
Downlink: S2-band 2401.225 - 2401.475 MHz CW/USB
K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon: 2401.323, 24,048.035
[05232004]

SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational

Uplink: to be released
Downlink: 437.075 MHz
Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz
Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Non-Operational?????

Uplink/downlink: 145.827 MHz 1200 baud AX.25 AFSK via W3ADO-1
Aux/Uplink: 435.250 MHz 9600 baud via PCSAT-2 (off)
APRS Downlink: 144.390 MHz (Region 2)

This from Bob, WB4APR:
PCsat returned to negative-power-budget mode on 16 Feb 2005 and is not
expect- ed to be restorable until the next full-sun period in the Fall
when the southern Sun can better illuminate the south facing panel.
Between now and then you are welcome to try to get a packet digipeated,
but this will usually only work during mid-day passes in the Northern
Hemisphere due to sun angles.

Question asked of Bob WB4APR recently on the amsat-bb:
Is it alive?? I was just looking at the pcsat.aprs.org page at Findu
and it shows a lot of stations recently (within the last day) digipeating
through it.

Bob's reply:
PCsat is always "alive", but can only muster enough
power to get out a complete packet when it is in
near mid-day sun in the Northern hemisphere the
higher the latitude the better in the summer.

Over the next 2 weeks PCsat is entering one of thoes
periods. The 20 or so stations you see on the LIVE
web page are probably unattended beacons. But
if u hear good packets on 145.825 from PCsat during
mid-day, go ahead and use it...

Fortunately it will be in 100% sun during FD, but
Unfortunately, all that sun is from the side and
misses the best solar panel. Experience has shown
it will be useless at that time.

PCSat is a 1200-baud APRS digipeater designed for use by stations using
hand-held or mobile transceivers. Downlinks feed a central web site at:
http://pcsat.aprs.org

The APRS-equipped PCSat was built by midshipmen from the U.S. Naval Academy
under the guidance of Bob Bruninga, WB4APR.
[05242005]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
callsign KE6QMD, as per the user service agreement located at the following
URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Semi-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

AO-49 (SAFIR-M) is a German amateur radio payload onboard the small German
scientific satellite "RUBIN-2".

AO-49 was built by the German amateur radio association "AATiS
e.V." (German
acronym for "Arbeitskreis Amateurfunk und Telekommunikation in der Schule",
which means: 'working group for amateur radio anand telecommunications in
schools'). AO-49 is designed as a "store and broadcast" system for APRS
based messages, dedicated for the use of schools in combination with the
existing WX-Net and planned buoy experiments in Germany.

No transmissions detected since the 1st of February 2003! It appears
AO-49 is not properly aligned to illuminate the solar panels. This
should end soon. Due to its orbit, AO-49 will be in a phase without
eclipses until 13Feb03.

Martin DG8UAU has written a small software program "SAFIR-M Decoder" to
allow decoding of the received DATA0 frames. It is available at:
http://amend.gmxhome.de in the section Aktuelles.

Details on AO-49 (SAFIR-M) can be found at:
http://amend.gmxhome.de

Information about AATiS e.V. is available at:
http://www.aatis.de
[05092004]
=====
CUTE-1
Catalog number: 27844
Launched: June 30,2003

Status: Operational?

Uplink: ?
Downlink: 436.8375 CW
437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan)

Fernando, LU1HKO, reports hearing Cute-1 on 03/06/2005 18:40 (LU Time)
sending
CW telemetry.

CUTE 1 is a Japanese (Tokyo Institute of Technology) one kilogram
nanosatellite that was launched by a Rokot rocket from Plesetsk at
14:15 UT on 30 June 2003. It carries a 100 mW beacon at 436.8375 MHz.
Initial orbital parameters were period 101.4 min, apogee 831 km, perigee
819 km, and inclination 98.7?.

For further info about CUTE-1 goto:
http://lss.mes.titech.ac.jp/ssp/cubesat/operation/Schedule_e.html

ANS WSR is looking for more information about this satellite.
[03272005]
NNNN
/EX

SB SAT @ AMSAT <KB9MMC $ANS-177.S4
WSR 177 Part 4 06/26/2005

AMSAT NEWS SERVICE BULLETIN 177.S4 FROM AMSAT HQ
SILVER SPRING, MD, JUNE 26, 2005
TO ALL RADIO AMATEURS
BID: $ANS-177.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE
PROPOSED FOR LAUNCH AT THIS TIME:

UCISAT ?O-??
Catalog number:
Proposed Launch Date: October 31, 2005

Status: Under Construction

Downlink: Submission in Progress
Uplink: Submission in Progress
Callsign: Submission in Progress

This from Matt Bennett, KF6RTB, UCISAT Communications Team Member:

Our website is www.ucisat.net .This is a new website, however, and doesn't have the "Status" section active yet. Because of the growing interest in our project, I'll push our webmaster to create updates (hopefully) on a week-to-week basis. For now, the current status of the mission is as follows:

-Expected Launch Date: October 31st, 2005
-Frequency Allocation: Submission in Progress
-Construction Status: Sub-Assembly
[WSR to thank Matt Bennett, KF6RTB, for this week's report.]
[01302005]
=====
SSETI ?O-??
Catalog Number:
Proposed Launch Date: Early 2005

Status: Under Construction

During the last week, the completed modules have been fitted to the spaceframe and the wiring harness and integration completed. The satellite was moved on Wednesday to an anechoic chamber for EMC testing to ensure that the emissions from the satellites electronics, the 3W UHF transmitter and the S Band TX meet the spectral requirements of the launch agency and SSTL.

Several new pictures showing the rapid progress over the last 2 weeks have been uploaded to the SSETI Website. These include detailed shots of the S Band unit now wired to the antennas, cold gas propulsion and some taken inside the anechoic chamber.
http://sseti.gte.tuwien.ac.at/WSW4/express5.php

[ANS thanks David, G0MRF for the above information]

Looking at the website for the SSETI Express webcam
http://sseti.gte.tuwien.ac.at/WSW4/webcam.htm

[04102005]
=====
PCSAT2 ?0-??
Catalog Number:
Proposed Launch Date: May 2005

PCSAT2, which had previously been stowed in the Space Shuttle Discovery, arrived at Launch Complex 39B on 07 April 2005. PCSAT2 is now standing by ready to be launched on the first Space Shuttle return-to-flight mission.

PCSAT2 will use the same dual redundant AX.25 command and control system as used on PCsat (NO-44) offering 8 on/off commands, 5 telemetry channels and a serial port for the solar cell experiment telemetry. It also supports the Digital Comms Relay support of the PCsat/APRS mission. The packet uplink is on 145.825 MHz and the default downlinks are in the 435 MHz band to avoid any possible interference with existing ARISS missions. PCSAT2 will have quad redundant transmit inhibits for EVA safety issues, thus, it is also easy to turn off to avoid any issues with other UHF ARISS experiments that may be activated in the future. Also, the mission lifetime of PCSAT2 is only 1 year, because it is a sample-return mission, thus terminating any long term conflicts in spectrum management.

The PCSAT2 mission is intended as an opportunity to augment existing ARISS communications experiments with an external autonomous communications payload. In this regard, it has several potential uses:

* A UI-Digipeater to help ease congestion on the currently shared ARISS PMS (Packet Mail system)

* A PSK-31 transponder for multi-user communications to improve accessibility for schools and ARISS outreach programs.

* An FM Voice repeater for full duplex crew communications to facilitate crew-to-school ARISS contacts.

* Routine Telemetry on the spacecraft systems

For more information and pictures visit the PCSAT2 website at http://www.ew.usna.edu/~bruninga/pcsat2.html

[ANS thanks Bob, WB4APR for the above information]
[04102005}
=====
PHASE 3E ?O-??
Catalog Number:
Proposed Launch Date: Early 2006

Status: Under Construction

The AMSAT-Phase 3E satellite (P3E) is dedicated as communication and scientific platform for a highly elliptical orbit around Earth. The spacecraft will be created in a joint process together with the P5A Mars mission by an international team under leadership of AMSAT-DL

and continues the successful series of AMSAT-Phase 3 satellites.
Additionally the spacecraft will be a test bench for technology
developped for the Mars mission. The main task of P3E is to act as
communication platform for radio amateurs worldwide. A launch is
planned in the period 2004 to 2006.

For the latest project status update please visit the AMSAT-DL
P3-E web page:
http://www.amsat-dl.org/p3e/
[03272005]
=====
CP1 ?o-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N6CP
Proposed Transmit Frequency: 436.845
[03272005]
=====
CP2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.325
[03272005]
=====
HAUSAT1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: D90HP
Proposed Transmit Frequency: 437.465
[03272005]
=====
ICE Cube 1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: W2CXM
Proposed Transmit Frequency: 437.305
[03272005]
=====
ICE Cube 2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N2VR
Proposed Transmit Frequency: 437.425
[03272005]
=====
ION ?O-??

Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.505
[03272005]
=====
KUTEsat ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: KC0RMW
Proposed Transmit Frequency: 437.385
[03272005]
=====
MEROPE ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: K7MSU-1
Proposed Transmit Frequency: 145.980
[03272005]
=====
nCUBE1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
2407.25
[03272005]
=====
RINCON ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
437.345
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SEEDS ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: JQ1YGU
Proposed Transmit Frequency: 437.485
[03272005]
=====
Mea Huaka ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.405
[03272005]
NNNN
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ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satelite Report Editor is James K. Darrow, KB9MMC.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

Via the ans mailing list at AMSAT.ORG courtesy of AMSAT-NA.
To unsubscribe, send "unsubscribe ans" to Majordomo@amsat.org

293. Re: ISS Field Day

Newsgroup: rec.radio.amateur.space
Date: 2005-06-29 03:00:29 UTC
From: paul flautt <pjflautt@netpluscom.com>
Message-ID: <42C20ECD.DCE977DD@netpluscom.com>
Source record: 2007

Just packet in Ohio.

Paul

Kenneth PierceJr wrote:

> Heard packet downlink on 145.80 on two passes over Delaware but no voice.
> Has anyone heard any voice activity from ISS during field day?

294. Re: ISS Field Day

Newsgroup: rec.radio.amateur.space
Date: 2005-06-29 19:26:50 UTC
From: Rick <w7rtrick@firstinter.net>
Message-ID: <11c5tfq4n1tif10@corp.supernews.com>
Source record: 2008

Our club (K7DPS) worked it on voice on Sunday morning.
Rick Tannehill - W7RT

Kenneth PierceJr wrote:
> Heard packet downlink on 145.80 on two passes over Delaware but no voice.
> Has anyone heard any voice activity from ISS during field day?
>
>

295. ANS-184 AMSAT Weekly News Bulletins

Newsgroup: rec.radio.amateur.space
Date: 2005-07-04 20:58:43 UTC
From: JoAnne Maenpaa <wb9jej_no-spam@earthlink.net>
Message-ID: <7qhye.17511$eM6.16665@newsread3.news.atl.earthlink.net>
Source record: 2009

AMSAT NEWS SERVICE
ANS-184

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:

* AO-51 Off-Air
* ARISS Status
* Symposium Registration Now Online
* New Items at the AMSAT Store
* STSTLE List Operational Again
* Please Report Your AMSAT Field Day Results
* AMSAT Membership Challenge
* One Year Anniversary of Echo

SB SAT @ AMSAT $ANS-184.01
AO-51 Off-Air

AMSAT News Service Bulletin 184.01
From AMSAT HQ SILVER SPRING, MD.
July 3, 2005
To All RADIO AMATEURS
BID: $ANS-184.01

Sometime on Sunday, 26 June 2005, there was a software reset on AO-51. Getting a memory download of each program that was running on the satellite at the time has been completed. The Software Group will study this data to debug the programs. This will take a number of days to accomplish. We are working on this as fast as possible to get Echo back up and running.

Update 2 July from the AO-51 Web Site:

The current plan is to begin the sof twarereloadingSaturdayevening. When completed the satellite will be placed in the normal V/U FM repeater and 9k6 digital mode.

FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone

Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital

[ANS thanks Mike, KE4AZN for the above information]

/EX

SB SAT @ AMSAT $ANS-184.02
ARISS Status

AMSAT News Service Bulletin 184.02
From AMSAT HQ SILVER SPRING, MD.
July 3, 2005
To All RADIO AMATEURS
BID: $ANS-184.02

1.Texan School Contact Successful

Students attending the Hockaday Schools summer program in Dallas, Texas had the opportunity to speak to John Phillips, KE5DRY, on Monday, June 20. An audience of 300 students, teachers and parents gathered and watched as twelve children asked 22 questions of the astronaut. There was
limited media coverage, but those attending were thrilled with the event!

2.Planned School Contacts

The Mayborn Museum at Baylor University in Waco, Texas was scheduled for a contact via the telebridge station, WH6PN, in Hawaii on Monday, June 27
at 16:05 UTC.

Yokohama Elementary School in Kochi, Japan has been scheduled for a contact on Monday, July 4 at 09:20 UTC.

3.ARRL Article on Canadian, Swiss School Contacts

Students from Zurich International School in Horgen, Switzerland and children attending Ecole de la Source, in Mascouche, Quebec, Canada, experienced ARISS contacts with John Phillips, KE5DRY, on June 10 and 17,
respectively. ARRL ran a web story entitled, "International Students, Quebec Primary Schoolers Quiz Astronaut via Ham Radio."

See: http://www.arrl.org/news/stories/2005/06/22/4/?nc=1

4.ARISS CDs Delivered

The SuitSat Educational Project CDs and the updated QRZ callsign database
CD were transferred to Alexander Poleschuk. Mr. Poleschuk will deliver them to Energia this week.

5.Expedition 10 Crew Debrief Scheduled

The ARISS-U.S. team has been scheduled for a crew debrief with Leroy Chiao, KE5BRW. The Expedition 10 debrief is planned for Tuesday, June 28 at 4:15 pm ET.

6.ARISS International Meeting Held

The monthly ARISS International Teleconference was held on Tuesday, June 21. Items of discussion included preparation for the ARISS International
Meeting to be held in the U.K. August 1 / 2, and the funding which was obtained for the ARISS S-Band and L-Band antennas on the Columbus Module.
Also covered were the shipment of SSTV and SuitSat hardware, and the status of the SuitSat Educational Project. The next ARISS International Teleconference will be held on Tuesday, July 19.

[ANS thanks Carol Jackson, KB3LKI for the above information]

/EX

SB SAT @ AMSAT $ANS-184.03
Symposium Registration Now Online

AMSAT News Service Bulletin 184.03
From AMSAT HQ SILVER SPRING, MD.
July 3, 2005
To All RADIO AMATEURS
BID: $ANS-184.03

Registration for the 2005 AMSAT Space Symposium is now available on-line.
The Symposium will be held October 7-9 at the Holiday Inn Holidome in downtown Lafayette, LA. Information can be found on the Symposium web page at:

http://www.amsat.org/amsat-new/symposium/

In addition to downloading the registration form, for the first time attendees can now register online through the AMSAT store. Registration forms will also be mailed out with the annual ballots for the AMSAT board
of directors. Please see the AMSAT Store registration for more information:

http://www.amsat-na.com/SymposiumReg.php

Registration for the Annual Banquet, the Friday Night Shrimp Boil and the
Sunday Swamp Tour can all be done at the time you register for the Symposium.

[ANS thanks Emily, W0EEC for the above information]

/EX

SB SAT @ AMSAT $ANS-184.04
New Items at the AMSAT Store

AMSAT News Service Bulletin 184.04
From AMSAT HQ SILVER SPRING, MD.
July 3, 2005
To All RADIO AMATEURS
BID: $ANS-184.04

Bruce Paige, KK5DO, wearing his AMSAT Store Manager hat reports he has just completed adding some new items to the AMSAT Store. These items were
first introduced at the 2005 Dayton Hamvention.

AMSAT White T-Shirt $15
AMSAT Maroon Golf Shirt $30
AMSAT Gray Golf Shirt $30

Sizes small and medium are not available.

AMSAT Maroon Hat $10

AMSAT Magnet $2

Also recently added is the newly revised for 2005 book, "Getting Started With Amateur Satellites". This well written guide now includes both AO-51 and VO-52. The Digital Guide has been renamed to "Digital Satellite & Telemetry Guide" and was also revised in 2005.

Visit the Online AMSAT Store at http://www.amsat.org

[ANS thanks Bruce, KK5DO for the above information.]

/EX

SB SAT @ AMSAT $ANS-184.05
STSTLE List Operational Again

AMSAT News Service Bulletin 184.05
From AMSAT HQ SILVER SPRING, MD.
July 3, 2005
To All RADIO AMATEURS
BID: $ANS-184.05

The "STSTLE" is re-mobilizing in anticipation of the Space Shuttle return
to flight. Because of the long hiatus following the Columbia tragedy, the team is re-constituting the mailing list from scratch.

As in the past, the Space Shuttle orbital data will be posted on the AMSAT Web site. However, those wishing to receive AMSAT and TLE Keplerian data directly by e-mail will need to re-subscribe to the mailing list.

As in the past, we shall endeavor to provide several updates daily as well as provide updates to cover all thrust events.

The STSTLE Team Consists of:
- Dave Cottle, Sydney Australia
- Ken Ernandes, N2WWD, Indialantic, FL
- Dave Ransom, Pacific Palisades, CA
- Dave Simonson, Indialantic, FL

The link for e-mail subscribing/un-subscribing is:

www.aus-city.com/cgi-bin/dada/mail.cgi?flavor=subscribe&list=STSTLE_LIST

The provided e-mail address will checked and the user will be sent a subscription confirmation they will need to click to complete the process.

[ANS thanks Ken Ernandes, N2WWD for the above information.]

/EX

SB SAT @ AMSAT $ANS-184.06
Please Report Your AMSAT Field Day Results

AMSAT News Service Bulletin 184.06
From AMSAT HQ SILVER SPRING, MD.
July 3, 2005
To All RADIO AMATEURS
BID: $ANS-184.06

Bruce Paige, KK5DO, wearing his AMSAT Director of Contests and Awards hat, reminds us now that Field Day is over, please remember to get your pictures and stories as well as your score to him by midnight, July 18, 2005. Send your Field Day information to kk5do@amsat.org. He will then tabulate the results and get them into the Journal and AMSAT's online service.

Gunther Meisse would like pictures of kids operating satellites on Field Day 2005 for use in our AMSAT printed materials. Please e-mail to Gunther
Meisse, W8GSM at w8gsm@amsat.org. Thanks in advance for your help.

[ANS thanks Bruce, KK5DO, and Gunther W8GSM for the above information.]

/EX

SB SAT @ AMSAT $ANS-184.07
AMSAT Membership Challenge

AMSAT News Service Bulletin 184.7
From AMSAT HQ SILVER SPRING, MD.
July 3, 2005
To All RADIO AMATEURS
BID: $ANS-184.07

AMSAT member Kevin Schuchmann, WA6FWF, offered a membership challenge on June 27, 2005. Kevin wrote, "I will match the $44 membership fee for every non-member on the AMSAT-BB listserv that joins in the next two weeks up to $1000 dollars. If you have been sitting on the fence please look at what some of the BOD's have been doing for you to use the satellites that you have now like ECHO and join AMSAT knowing that your membership fee will be matched and will go to AMSAT's latest project EAGLE".

Gunther Meisse, W8GSM, AMSAT Treasurer, replied to Kevin, "Thank you for your generous offer. It is positive efforts like yours that will make a difference!!!

This was followed a day later by this message (Ed.)

"As I am sure you saw on the -bb yesterday, we have a great offer going for the next two weeks with a generous member offering to match the new member sign-up dues up to $1,000.00. Well, the offer gets even better today when member, Jeff Davis, KE9V, makes the following offer for the next 23 new member sign-ups: "I'd be willing buy the new AMSAT book, 'Getting Started With Amateur Satellites' ($15 each) for each of those 22 new AMSAT members who joins in the next few weeks." Thanks Jeff.."

Now, come on non members. What better time to join thsn right now? Your sign-up has double the financial impact.. We need just 22 new sign-ups within the next two weeks to take full advantage of this generous offer."

Either go to the amsat.org web site, or call Martha at AMSAT Headquarters
after 10AM EDT at (301) 589-6062. She is standing by to help you!

[ANS thanks Kevin, WA6FWF, and Gunther, W8GSM, for the above information]

/EX

SB SAT @ AMSAT $ANS-184.08
One Year Anniversary of Echo

AMSAT News Service Bulletin 184.08
From AMSAT HQ SILVER SPRING, MD.
July 3, 2005
To All RADIO AMATEURS
BID: $ANS-184.08

June 29th will mark the 1-year anniversary of the Launch of Echo. On June 29, 2004, Echo, now AO-51, was launched from Baikonur, Kazakhstan, on top of a Dnepr launch vehicle. Echo was one of 8 satellites which were placed into Sun Synchronous Orbit during this launch. After approximately a month of commissioning and testing, the satellite was placed into amateur radio service.

Much more information about the history of Echo is available in Gould Smith's (WA4SXM) book, "AO-51 Development, Operations, and

Specifications", available from Amsat-NA.

I hope everyone has enjoyed the first year of Echo's in-orbit life, the wide variety of modes and experiments that have been operated to date on the satellite, and are looking forward to many more opportunities with Echo in the years ahead. If you use and enjoy Echo please consider joining Amsat-NA, or your Country's Amsat organization. It is one way that we can continue to do what we enjoy; make contacts via Amateur Radio Satellites.

73 KE4AZN
Echo Command Team
Echo Operation Group
Amsat VP Operations

[ANS thanks Lee, McLamb, KU4OS for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Dave Johnson, G4DPZ
G4DPZ at amsat dot org

Via the ans mailing list at AMSAT.ORG courtesy of AMSAT-NA.
To unsubscribe, send "unsubscribe ans" to Majordomo@amsat.org

296. WSR-185 AMSAT Weekly Satellite Status Report

Newsgroup: rec.radio.amateur.space
Date: 2005-07-04 20:59:44 UTC
From: JoAnne Maenpaa <wb9jej_no-spam@earthlink.net>
Message-ID: <4rhye.17512$eM6.6124@newsread3.news.atl.earthlink.net>
Source record: 2010

```
This report is organized into 4 parts.
Part 1 - operational analog amateur satellites.
Part 2 - operational digital amateur satellites.
Part 3 - non - operational satellites
Part 4 - proposed satellites

SB SAT @ AMSAT <W8ISS $ANS-185.S1
WSR 185 Part 1 07/03/2005

AMSAT NEWS SERVICE BULLETIN 185.S1 FROM AMSAT HQ
SILVER SPRING, MD, JULY 03, 2005
TO ALL RADIO AMATEURS
BID: $ANS-185.S1

VO-52 HAMSAT
Catalog Number: 28650
Launch Date: May 05,2005

Status: On orbit
Current Mode: U/V

Proposed frequencies:
--------------------
Indian transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacom : 145.940MHz continue carier signal

Dutch transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacon : 145.860MHz 12WPM with CW message

HAMSAT has been assigned the OSCAR designation VO-52.
[06192005]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - ON
FM REPEATER - ON

Analog voice downlink: 435.300 MHz FM
Analog voice uplink: 145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone
```

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

4 July until ????
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital

We are going to run in this mode for a while to monitor the satellite after
the software reloading.

AO-51 is back operational in the mode listed below. Both the PBBS and the FM
repeater are turned on and users are welcome to use the satellite. The soft-
ware reloading has been completed. I spent a good deal of my holiday time
this
week and weekend at home in order to download the data and then reload the
satellite software to get it back up and running ASAP.

The software team has reviewed the data downloaded from the satellite
memory. They indicate nothing out of the ordinary in their first review of
the data, therefore the decision was made to reload the satellite software
and get AO-51 active again. The software team will continue to review the
information they have. Also, if we have another problem and the satellite
resets itself again, we will download the memory and compare the results.

73 KE4AZN
Echo Command Team

[ANS thanks Mike, KE4AZN for the above information]
[07032005]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz (67.0 Hz PL tone) (See below for operating
procedures)
Downlink: 436.795 MHz

There have been unconfirmed reports on the amsat-bb remailer that So-50 has
shifted downlink frequency as much as 5khz up. This both from Europe.

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary)

1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm
the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT
the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window
will reset the 10 minute timer.
[09122004]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplink: 145.850 145.870 145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Please send the reception reports to lab2 'at' jarl.or.jp.
Please use the subject line: 'FO-29 reception report'.

Mineo, JE9PEL, has an FO-29 satellite telemetry analysis program that will
automatically analyze all digital telemetry from the satellite (such as
current, voltage and temperature). FO29CWTE is available at:
http://www.ne.jp/asahi/hamradio/je9pel/
[03132005]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

The latest information on AO-27 from control operator Michael Wyrick,
N3UC (former N4USI), can be found at:
http://www.ao27.org

An AO-27 question-and-answer page is available on the AMSAT-NA web
site, with updates by Ray, W2RS. The URL is:
http://www.amsat.org/amsat/intro/ao27faq.html

[ANS thanks John, K6YK, for this week's AO-27 report]
[08292004]
=====

AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Semi-operational in sunlight.
Return to active status: June 21,2002

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A
145.975 to 145.925 MHz CW/USB Mode B
Beacon: 29.502 MHz, 145.972 MHz, 435.1 MHz, 2304.1 MHz

Emily, W0EEC has created a website to allow the users of AO-7 to record
contacts, observations and use of the satellite more effectively at:
http://www.emilyshouse.com/experthams/ao7/main.php
This includes the ability to log contacts.

Tim, K3TZ has written a program to decode AO-07 telemetry.
The program can be downloaded at:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

For more AO-7 info:
http://www.amsat.org/amsat/sats/n7hpr/ao7.html
[11142004]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Packet (APRS-style connections)
Digipeater: Active

The current Expedition 11 crew is:
Commander Sergei Krikalev
Flight Engineer John Phillips

Worldwide packet uplink: 145.990 MHz FM
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM
Doppler Shift is 10 KHz

Russian callsigns: RS0ISS, RZ3DZR
USA callsign: NA1SS
Packet station mailbox callsign: RS0ISS-11
Packet station keyboard callsign: RS0ISS-3
Digipeater callsign: ARISS

The ISS daily crew schedule can be found at:
http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is
NOT translated from Russian and posted.

More information is available at:
http://www.rac.ca/ariss
http://spaceflight.nasa.gov/station/reference/radio/
http://www.marexmg.org/fileshtml/unprotopage.html
http://www.issfanclub.com
http://oscar.dcarr.org/
[04242005]
NNNN
/EX

SB SAT @ AMSAT <W8ISS $ANS-185.S2
WSR 185 Part 2 07/03/2005

AMSAT NEWS SERVICE BULLETIN 185.S2 FROM AMSAT HQ
SILVER SPRING, MD, JULY 03, 2005
TO ALL RADIO AMATEURS
BID: $ANS-185.S2

AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - ON
FM REPEATER - ON

Analog voice downlink: 435.300 MHz FM
Analog voice uplink: 145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

4 July until ????
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital

We are going to run in this mode for a while to monitor the satellite after
the software reloading.

AO-51 is back operational in the mode listed below. Both the PBBS and the FM repeater are turned on and users are welcome to use the satellite. The software reloading has been completed. I spent a good deal of my holiday time this
week and weekend at home in order to download the data and then reload the satellite software to get it back up and running ASAP.

The software team has reviewed the data downloaded from the satellite memory. They indicate nothing out of the ordinary in their first review of the data, therefore the decision was made to reload the satellite software and get AO-51 active again. The software team will continue to review the information they have. Also, if we have another problem and the satellite resets itself again, we will download the memory and compare the results.

73 KE4AZN
Echo Command Team

[ANS thanks Mike, KE4AZN for the above information]
[07032005]
=====
GO-32 TECHSAT-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
(435.325 n/a - temperature problems)
Uplinks: 145.850, 145.890, 145.930 FM
1269.700, 1269.800, 1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[03132005]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink: 145.850 or 145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz
Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey

Satellite Technology Ltd.
[05152005]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for
APRS users.

Uplink: 145.90 145.92 145.94 145.96 MHz FM
(using 1200-baud Manchester FSK)
Downlink: 437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon: 2401.1428 MHz
Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

A WOD collection of current graphics along with general information
and telemetry samples can be found at:
http://www.telecable.es/personales/ea1bcu
[05092004]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational?

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK).
approx. 10 days ON, 10 days OFF
Mode-S Beacon: 2401.500 MHz. ... OFF
UHFBeacon: 435.025 MHz. ... OFF

This from Clive, G3CWV:

There is a small chance that OSCAR-11 may have started transmitting
again between 08 June to 10 June.

The frequency is 145.826.

Any reception reports would be appreciated. Please reply direct to
Clive G3CWV (g3cwv@amsat.org), or post reports to AMSAT-BB.

[ANS thanks Clive, G3CWV for the above information]

More information on UO-11 OSCAR-11 can be found at:
http://www.users.zetnet.co.uk/clivew/
[06122005]
NNNN
/EX

SB SAT @ AMSAT <W8ISS $ANS-185.S3
WSR 185 Part 3 07/03/2005

AMSAT NEWS SERVICE BULLETIN 185.S3 FROM AMSAT HQ
SILVER SPRING, MD, JULY 03, 2005
TO ALL RADIO AMATEURS
BID: $ANS-185.S3

THE FOLLOWING ARE IN ORBIT BUT ARE
NON-OPERATIONAL AT THIS TIME:

POSAT-1 PO-28
Catalog Number: 22829
Launched : September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 435.075 MHz
435.275 MHz

Uplink: 145.925 MHz
145.975 MHz

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

More information of POSAT-1 can be found at:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
http://www.amsat.org/amsat/sats/n7hpr/po28.html
[08152004]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon: 145.810 MHz (unmodulated carrier)

AO-10 has been locked into a Mode-B, 70-cm uplink and
2-meter downlink for several years.

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Non-operational

Uplink: 145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink: 435.812 MHz SSB
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Alberto E. Zagni - I2KBD reports on 02/13/05
The spacecraft is in MBL (safe mode) and is trasmitting just 6 channels
of telemetry. Temperatures and voltage are nominal, but there seems to
be a problem with the onboard receiver, refusing to accept commands.
The spacecraft was launched in 1993, thus nearing 12 years in orbit...

Best regards
Alberto E. Zagni - I2KBD
ITAMSAT Mission Director

More information of IO-26 can be found at:

http://joshua.micronet.it/english/itamsat/itamsathome.html
http://www.amsat.org/amsat/sats/n7hpr/io26.html
www.itamsat.org

[02132005]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon: 29.408 MHz
Robot: 29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB
Beacon: 145.860 MHz
Robot: 145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575

Launched: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB
Beacon: 29.352 MHz (intermittent)
SSB meeting frequency: 29.380 MHz (unofficial)

John, KD6PAG reports on June 16, 2004 to ANS:
RS-15 beacon seemed to be back in the mode where it's a tone about 5 seconds
off and then 5 seconds on this morning.

ANS is looking for more confirmations of RS-15 coming back.

[ANS thanks John, KD6PAG for RS-15 information]
[06202004]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplink: 145.84 145.86 145.88 145.90 MHz FM
(using 1200-baud Manchester FSK)
CW downlink: 437.125 MHz
Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)
Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM
Broadcast Callsign: HLO1-11
BBS: HLO1-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a
non-operational status.
[05092004]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM (9600-baud FSK)
Downlink: 436.500 MHz FM
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink frequency (listed on the PanSat web site) 436.500 MHz

The satellite is not available for general uplink transmissions.

The Naval Postgraduate School developed PanSat. At the time of
launch, PanSat spread-spectrum digital transponders were to
be available to Amateur Radio operators along with software to utilize
this technology.

The satellite is still operating, however, the spread spectrum packet
radio portion never took place. The spacecraft is now beyond it's
initial 2-year mission life, but telemetry records are still being
downloaded.

For more information, visit the official PanSat web site at:
http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS has no further information]
[05232004]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlink: 437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA
web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609

Launch Date: November 16, 2000

Status: Non-Operational

Uplink V-band 145.840 - 145.990 MHz CW/LSB
U-band 435.550 - 435.800 MHz CW/LSB
L1-band 1269.250 - 1269.500 MHz CW/LSB
L2-band 1268.325 - 1268.575 MHz CW/LSB
S1-band 2400.350 - 2400.600 MHz CW/LSB
Downlink: S2-band 2401.225 - 2401.475 MHz CW/USB
K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon: 2401.323, 24,048.035
[05232004]

SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational

Uplink: to be released
Downlink: 437.075 MHz
Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz
Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Non-Operational?????

Uplink/downlink: 145.827 MHz 1200 baud AX.25 AFSK via W3ADO-1
Aux/Uplink: 435.250 MHz 9600 baud via PCSAT-2 (off)
APRS Downlink: 144.390 MHz (Region 2)

This from Bob, WB4APR:
PCsat returned to negative-power-budget mode on 16 Feb 2005 and is not
expect- ed to be restorable until the next full-sun period in the Fall
when the southern Sun can better illuminate the south facing panel.
Between now and then you are welcome to try to get a packet digipeated,
but this will usually only work during mid-day passes in the Northern
Hemisphere due to sun angles.

Question asked of Bob WB4APR recently on the amsat-bb:
Is it alive?? I was just looking at the pcsat.aprs.org page at Findu
and it shows a lot of stations recently (within the last day) digipeating
through it.

Bob's reply:
PCsat is always "alive", but can only muster enough
power to get out a complete packet when it is in
near mid-day sun in the Northern hemisphere the
higher the latitude the better in the summer.

Over the next 2 weeks PCsat is entering one of thoes
periods. The 20 or so stations you see on the LIVE
web page are probably unattended beacons. But
if u hear good packets on 145.825 from PCsat during
mid-day, go ahead and use it...

Fortunately it will be in 100% sun during FD, but
Unfortunately, all that sun is from the side and
misses the best solar panel. Experience has shown
it will be useless at that time.

PCSat is a 1200-baud APRS digipeater designed for use by stations using
hand-held or mobile transceivers. Downlinks feed a central web site at:
http://pcsat.aprs.org

The APRS-equipped PCSat was built by midshipmen from the U.S. Naval Academy
under the guidance of Bob Bruninga, WB4APR.
[05242005]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
callsign KE6QMD, as per the user service agreement located at the following
URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====

AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Semi-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

AO-49 (SAFIR-M) is a German amateur radio payload onboard the small German scientific satellite "RUBIN-2".

AO-49 was built by the German amateur radio association "AATiS e.V." (German
acronym for "Arbeitskreis Amateurfunk und Telekommunikation in der Schule", which means: 'working group for amateur radio anand telecommunications in schools'). AO-49 is designed as a "store and broadcast" system for APRS based messages, dedicated for the use of schools in combination with the existing WX-Net and planned buoy experiments in Germany.

No transmissions detected since the 1st of February 2003! It appears AO-49 is not properly aligned to illuminate the solar panels. This should end soon. Due to its orbit, AO-49 will be in a phase without eclipses until 13Feb03.

Martin DG8UAU has written a small software program "SAFIR-M Decoder" to allow decoding of the received DATA0 frames. It is available at: http://amend.gmxhome.de in the section Aktuelles.

Details on AO-49 (SAFIR-M) can be found at:
http://amend.gmxhome.de

Information about AATiS e.V. is available at:
http://www.aatis.de
[05092004]
=====
CUTE-1
Catalog number: 27844
Launched: June 30,2003

Status: Operational?

Uplink: ?
Downlink: 436.8375 CW
437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan)

Fernando, LU1HKO, reports hearing Cute-1 on 03/06/2005 18:40 (LU Time) sending
CW telemetry.

CUTE 1 is a Japanese (Tokyo Institute of Technology) one kilogram nanosatellite that was launched by a Rokot rocket from Plesetsk at

14:15 UT on 30 June 2003. It carries a 100 mW beacon at 436.8375 MHz.
Initial orbital parameters were period 101.4 min, apogee 831 km, perigee
819 km, and inclination 98.7?.

For further info about CUTE-1 goto:
http://lss.mes.titech.ac.jp/ssp/cubesat/operation/Schedule_e.html

ANS WSR is looking for more information about this satellite.
[03272005]
NNNN
/EX

SB SAT @ AMSAT <W8ISS $ANS-185.S4
WSR 185 Part 4 07/03/2005

AMSAT NEWS SERVICE BULLETIN 185.S4 FROM AMSAT HQ
SILVER SPRING, MD, JULY 03,2005
TO ALL RADIO AMATEURS
BID: $ANS-185.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE
PROPOSED FOR LAUNCH AT THIS TIME:

UCISAT ?O-??
Catalog number:
Proposed Launch Date: October 31, 2005

Status: Under Construction

Downlink: Submission in Progress
Uplink: Submission in Progress
Callsign: Submission in Progress

This from Matt Bennett, KF6RTB, UCISAT Communications Team Member:

Our website is www.ucisat.net .This is a new website, however, and doesn't
have the "Status" section active yet. Because of the growing interest in our
project, I'll push our webmaster to create updates (hopefully) on a week-to-
week basis. For now, the current status of the mission is as follows:

-Expected Launch Date: October 31st, 2005
-Frequency Allocation: Submission in Progress
-Construction Status: Sub-Assembly
[WSR to thank Matt Bennett, KF6RTB, for this week's report.]
[01302005]
=====
SSETI ?O-??
Catalog Number:
Proposed Launch Date: Early 2005

Status: Under Construction

>From Graham, G3VZV:
All work on the SSETI Express spacecraft has now been completed and the

spacecraft has left its "birthplace" - a cleanroom at the ESA ESTEC facility in the Netherlands. The spacecraft has been packed into its special transport
container and is en-route to the launch site at Plesetsk in Northern Russia.

The launch date is still listed as 25th August (current approx lift off is 06:50UTC but this may be corrected later) and arrangements are underway for the launch to be shown live on ASTRA-1G - a Ku band satellite covering most of Europe and, hopefully, these transmissions will also be streamed at both high and low resolution on the internet.

Full details of all these media resources will be made known as soon as they are finalised as will details of the telemetry downloading and decoding software and the prizes being offered by ESA for the largest and also the first contributor!

AMSAT-UK will have a team member at the launch site during the launch campaign and intend to provide regular updates during the lead up to August 25th.

You can find more info about SSETI at:
http://sseti.gte.tuwien.ac.at/WSW4/

[ANS thanks Graham, G3VZV for the above information]

Looking at the website for the SSETI Express webcam
http://sseti.gte.tuwien.ac.at/WSW4/webcam.htm

[07032005]
=====
PCSAT2 ?0-??
Catalog Number:
Proposed Launch Date: May 2005

PCSAT2, which had previously been stowed in the Space Shuttle Discovery, arrived at Launch Complex 39B on 07 April 2005. PCSAT2 is now standing by ready to be launched on the first Space Shuttle return-to-flight mission.

PCSAT2 will use the same dual redundant AX.25 command and control system as used on PCsat (NO-44) offering 8 on/off commands, 5 telemetry channels and a serial port for the solar cell experiment telemetry. It also supports the Digital Comms Relay support of the PCsat/APRS mission. The packet uplink is on 145.825 MHz and the default downlinks are in the 435 MHz band to avoid any possible interference with existing ARISS missions. PCSAT2 will have quad redundant transmit inhibits for EVA safety issues, thus, it is also easy to turn off to avoid any issues with other UHF ARISS experiments that may be activated in the future. Also, the mission lifetime of PCSAT2 is only 1 year, because it is a sample-return mission, thus terminating any long term conflicts in spectrum management.

The PCSAT2 mission is intended as an opportunity to augment existing ARISS communications experiments with an external autonomous communications payload. In this regard, it has several potential uses:

* A UI-Digipeater to help ease congestion on the currently shared ARISS PMS (Packet Mail system)

* A PSK-31 transponder for multi-user communications to improve accessibility for schools and ARISS outreach programs.

* An FM Voice repeater for full duplex crew communications to facilitate crew-to-school ARISS contacts.

* Routine Telemetry on the spacecraft systems

For more information and pictures visit the PCSAT2 website at http://www.ew.usna.edu/~bruninga/pcsat2.html

[ANS thanks Bob, WB4APR for the above information]
[04102005}
=====
PHASE 3E ?O-??
Catalog Number:
Proposed Launch Date: Early 2006

Status: Under Construction

The AMSAT-Phase 3E satellite (P3E) is dedicated as communication and scientific platform for a highly elliptical orbit around Earth. The spacecraft will be created in a joint process together with the P5A Mars mission by an international team under leadership of AMSAT-DL and continues the successful series of AMSAT-Phase 3 satellites. Additionally the spacecraft will be a test bench for technology developped for the Mars mission. The main task of P3E is to act as communication platform for radio amateurs worldwide. A launch is planned in the period 2004 to 2006.

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[03272005]
=====
CP1 ?o-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N6CP
Proposed Transmit Frequency: 436.845
[03272005]
=====
CP2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.325
[03272005]
=====
HAUSAT1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: D90HP
Proposed Transmit Frequency: 437.465
[03272005]
=====
ICE Cube 1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: W2CXM
Proposed Transmit Frequency: 437.305
[03272005]
=====
ICE Cube 2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N2VR
Proposed Transmit Frequency: 437.425
[03272005]
=====
ION ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.505
[03272005]
=====
KUTEsat ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: KC0RMW
Proposed Transmit Frequency: 437.385
[03272005]
=====
MEROPE ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: K7MSU-1
Proposed Transmit Frequency: 145.980
[03272005]
=====
nCUBE1 ?O-??

Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
2407.25
[03272005]
=====
RINCON ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
437.345
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SEEDS ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: JQ1YGU
Proposed Transmit Frequency: 437.485
[03272005]
=====
Mea Huaka ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.405
[03272005]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satelite Report Editor is James K. Darrow, KB9MMC.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

Via the ans mailing list at AMSAT.ORG courtesy of AMSAT-NA.
To unsubscribe, send "unsubscribe ans" to Majordomo@amsat.org

297. Radio Meteor Obs. Bull. June 2005

Newsgroup: rec.radio.amateur.space
Date: 2005-07-07 21:44:51 UTC
From: Chris Steyaert <observations@rmob.org>
Message-ID: <a58rc1hqiepbdu9qvdqh5m77hjs87tkvol@4ax.com>
Source record: 2011
Cross-posted to: rec.radio.amateur.space,sci.astro.amateur

Radio Meteor Observation Bulletin No. 143 of June 2005 (66 K) is available now as

http://visualrmob.free.fr/rmobtext/rmob0506.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

http://radio.data.free.fr

Chris

298. ANS-191 AMSAT News Service Weekly Bulletin

Newsgroup: rec.radio.amateur.space
Date: 2005-07-11 13:59:41 UTC
From: JoAnne Maenpaa <wb9jej_no-spam@earthlink.net>
Message-ID: <hXuAe.8312$aY6.4927@newsread1.news.atl.earthlink.net>
Source record: 2012

AMSAT NEWS SERVICE
ANS-191

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* AO-51 July Schedule
* ARISS Status - 04 July 2005
* OSCAR-11 Reception Reports Requested
* AMSAT Journal Status
* 2004 Annual Report & Audit

SB SAT @ AMSAT $ANS-191.01
AO-51 July Schedule

AMSAT News Service Bulletin 191.01
From AMSAT HQ SILVER SPRING, MD.
July 10, 2005
To All RADIO AMATEURS
BID: $ANS-191.01

The July AO-51 schedule has been posted on the AMSAT Web site www.amsat.org. The mode change on July 11 may not occur on schedule due to Hurricane Dennis' expected path, which is coming right for AMSAT's command operator and station, Mike, KE4AZN. Please understand if that change is delayed by a number of days. Based on the projected path Mike will be taking down his antennas and will be securing everything at his QTH on Saturday.

July 2005 AO-51 (Amsat Echo) Schedule

All dates are UTC. The mode change occurs normally between 0100 and 0400 UTC on the date shown. The mode will be active from the date shown until the next Mode Change date listed. Mode Configurations are listed below the schedule. If for some unplanned reason we need to work with Echo and deviate from the plan a note will be posted to the this Echo page on AMSAT.ORG.

If a specific transmitter or mode is not listed on a given day then it
will be off. For example, if TXB (435.300) is not listed during a 38k4
digital mode period then the FM repeater will be off.

4 July
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital

11 July
Dual FM Repeaters
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
FM Repeater, V/U
Uplink: 145.880 mhz FM
Downlink 435.150 mhz FM

18 July
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital

21 July
38k4 Digital on S Band in support of SSETI Satellite
38k4 Digital Downlink, V/S, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 2401.200 mhz FM, 38k4 PBP Digital

23 July
FM Repeater, V/S
Uplink: 145.920 mhz FM, 67hz PL Tone
Downlink 2401.200 mhz FM

73 KE4AZN
for Echo Operations Group

[ANS thanks Mike, KE4AZN for the above information]

/EX

SB SAT @ AMSAT $ANS-191.02
ARISS Status - 04 July 2005

AMSAT News Service Bulletin 191.02
From AMSAT HQ SILVER SPRING, MD.
July 10, 2005
To All RADIO AMATEURS

BID: $ANS-191.02

1. Mayborn Museum Contact Successful

Children visiting the Mayborn Museum at Baylor University in Waco, Texas enjoyed a contact with John Phillips, KE5DRY, on Monday, June 27 via the telebridge station, WH6PN, in Hawaii. Eleven children asked twenty-one questions as a crowd of 200 gathered in the auditorium. Two television stations and a newspaper also attended.

The Waco Tribune-Herald wrote an article entitled, "Local children get chance to talk to astronaut in space." See: http://www.wacotrib.com/news/content/news/stories/2005/06/28/20050628wacspacelink.html

"Students Enjoy Lively Chat with Astronaut" can be found on the Baylor University website. To view, go to: http://www.baylor.edu/pr/news.php?action=story&story=34716

The NBC affiliate, KCEN-TV, posted an article on their website with a link to the video coverage of this event. "Kids make long-distance call to space at museum" can be found at: http://www.museumnews.net/link.asp?ID=27483&Title=KIDS%20make%20long-distance%20call%20to%20space%20at%20museum

The event was also webcast, and audio was fed through the Echolink AMSAT and EDU_NET servers. Connections to the AMSAT conference room were made from 8 countries: Japan, Australia, U.S.A., U.K., Bangladesh, Italy, Ukraine, and Canada.

2. ARISS-Russia Contact

A second ARISS contact was made over the weekend. On Saturday, July 2, children at the Museum K.I. Tziolkovsky in Kirov, Russia were able to speak to Sergei Krikalev, U5MIR, via the telebridge station W5RRR in Houston. The event was webcast, and the audio was fed through Echolink and IRLP.

3. SuitSat Hardware Delivered to Energia

The SuitSat and SSTV hardware arrived in Russia on Wednesday, June 29. The ARISS-Russia team will begin integrating and flight certifying the SuitSat hardware. All hardware is expected to fly on the Progress 19P, scheduled to launch in the August/September timeframe.

4. Expedition 10 Crew Debrief

On June 28, the ARISS-U.S. team had the opportunity to speak with Leroy Chiao, KE5BRW, about ARISS school contacts and operations during Expedition 10. Leroy's overall impression of the program was positive. Kenneth Ransom presented to Leroy a plaque from the ARRL for his participation in and his support of the ARISS program, and for his record breaking twenty-three contacts - the most school contacts made by one astronaut during a single increment. Thank you Leroy!

5. Expedition 11 Crew Participates in Field Day

John Phillips, KE5DRY, and Sergei Krikalev, U5MIR, both participated in Field Day on June 25-26. John made 25 contacts, and although Sergei's report has not yet been submitted, he did make at least four contacts from Brazil, Thailand, S. Africa and the U.S.

6. PCSAT2/MISSE5 to Fly on STS-114

As part of an educational outreach program, students at the United States Naval Academy, in collaboration with the DOD and ARISS, and under the direction of Bob Bruninga, WB4APR, designed and developed PCSAT2. This payload will be carried on a Materials International Space Station Experiment (MISSE5) on a Passive Experiment Container (PEC). The PEC (suitcase) will be opened and will carry DOD solar cells on the front side, facing the sun, and the back side will carry the amateur satellite communications system which will include Automatic Position Reporting System (APRS) Packet, FM voice repeater, and 10m PSK-31 transponder. The payload will be launched on the Return to Flight STS-114 mission, scheduled for July 13, 2005, and will be deployed via an EVA as an external payload on the ISS. This project is described in detail on Bruninga's website, "PCSAT2 - External ISS Experiment in the Amateur Satellite Service." See: http://www.ew.usna.edu/~bruninga/pcsat2.html

[ANS thanks Carol Jackson, KB3LKI for the above information]

/EX

SB SAT @ AMSAT $ANS-191.03
OSCAR-11 Reception Reports Requested

AMSAT News Service Bulletin 191.03
From AMSAT HQ SILVER SPRING, MD.
July 10, 2005
To All RADIO AMATEURS
BID: $ANS-191.03

Clive, G3CWV, reports that he has not heard from OSCAR-11 since 30 April 2005. However he has received two reception reports dated 19 May and 13 June. This suggests that the satellite might be switching ON for one or two orbits at about 24 to 28 day intervals, ie the next transmission might be expected sometime between 07 and 11 July.

Any reception reports during this period, or at any other time would be appreciated. The frequency is 145.826 MHz. and modulation NBFM. Please send any reports direct to g3cwv@amsat.org, or post to AMSAT-BB.

If you are unfamiliar with the sound of OSCAR-11, a 10 second audio clip of the VHF beacon is available at the start of the OSCAR-11 web page. The URL is http://www.users.zetnet.co.uk/clivew/

[ANS thanks Clive, G3CWV for the above information]

/EX

SB SAT @ AMSAT $ANS-191.04
AMSAT Journal Status

AMSAT News Service Bulletin 191.04
From AMSAT HQ SILVER SPRING, MD.
July 10, 2005
To All RADIO AMATEURS
BID: $ANS-191.04

Martha, AMSAT Manager reports that the May/June issue is now at our new printer. The previous printer went out of business just as we were ready to go to press! We apologize for the delay and thank you for your patience.

AMSAT Journal Editor Ed Long, WA4SWJ is already hard at work on the July/August edition and is looking for articles. If you have something that you think would be interesting please contact Ed at journal@amsat.org. If you don't feel comfortable writing an article yourself, we now have some volunteer 'reporters' to help take your story and turn it into an article for the Journal.

[ANS thanks Martha and Ed, WA4SWJ for the above information]

/EX

SB SAT @ AMSAT $ANS-191.05
2004 Annual Report & Audit

AMSAT News Service Bulletin 191.05
From AMSAT HQ SILVER SPRING, MD.
July 10, 2005
To All RADIO AMATEURS
BID: $ANS-191.05

AMSAT Treasurer, Gunther Meisse, W8GSM, reports that the 2004 Annual Report is now done and posted to the amsat.org web site under the link: "About AMSAT" "Corporate Documents", Annual Reports". The Audit firm has also completed the 2004 audit of the AMSAT books and submitted their report. It is also available for inspection on the amsat.org web site.

[ANS thanks Gunther, W8GSM for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS
KU4OS at amsat dot org

Via the ans mailing list at AMSAT.ORG courtesy of AMSAT-NA.

To subscribe, send "subscribe ans" to Majordomo@amsat.org

299. WSR-191 AMSAT Weekly Satellite Report

Newsgroup: rec.radio.amateur.space
Date: 2005-07-11 14:00:58 UTC
From: JoAnne Maenpaa <wb9jej_no-spam@earthlink.net>
Message-ID: <uYuAe.8314$aY6.4949@newsread1.news.atl.earthlink.net>
Source record: 2013

```
This report is organized into 4 parts.
Part 1 - operational analog amateur satellites.
Part 2 - operational digital amateur satellites.
Part 3 - non - operational satellites
Part 4 - proposed satellites

SB SAT @ AMSAT <W8ISS $ANS-191.S1
WSR 191 Part 1 07/09/2005

AMSAT NEWS SERVICE BULLETIN 191.S1 FROM AMSAT HQ
SILVER SPRING, MD, JULY 09, 2005
TO ALL RADIO AMATEURS
BID: $ANS-191.S1

VO-52 HAMSAT
Catalog Number: 28650
Launch Date: May 05,2005

Status: On orbit
Current Mode: U/V

Proposed frequencies:
-------------------
Indian transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacom : 145.940MHz continue carier signal

Dutch transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacon : 145.860MHz 12WPM with CW message

HAMSAT has been assigned the OSCAR designation VO-52.
[06192005]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - ON
FM REPEATER - ON

Analog voice downlink: 435.300 MHz FM
Analog voice uplink: 145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone
```

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

4 July until ????
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital

We are going to run in this mode for a while to monitor the satellite after
the software reloading.

AO-51 is back operational in the mode listed below. Both the PBBS and the FM
repeater are turned on and users are welcome to use the satellite. The soft-
ware reloading has been completed. I spent a good deal of my holiday time
this
week and weekend at home in order to download the data and then reload the
satellite software to get it back up and running ASAP.

The software team has reviewed the data downloaded from the satellite
memory. They indicate nothing out of the ordinary in their first review of
the data, therefore the decision was made to reload the satellite software
and get AO-51 active again. The software team will continue to review the
information they have. Also, if we have another problem and the satellite
resets itself again, we will download the memory and compare the results.

73 KE4AZN
Echo Command Team

[ANS thanks Mike, KE4AZN for the above information]
[07032005]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz (67.0 Hz PL tone) (See below for operating
procedures)
Downlink: 436.795 MHz

There have been unconfirmed reports on the amsat-bb remailer that So-50 has
shifted downlink frequency as much as 5khz up. This both from Europe.

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary)

1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm
the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT
the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window
will reset the 10 minute timer.
[09122004]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplink: 145.850 145.870 145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Please send the reception reports to lab2 'at' jarl.or.jp.
Please use the subject line: 'FO-29 reception report'.

Mineo, JE9PEL, has an FO-29 satellite telemetry analysis program that will
automatically analyze all digital telemetry from the satellite (such as
current, voltage and temperature). FO29CWTE is available at:
http://www.ne.jp/asahi/hamradio/je9pel/
[03132005]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

The latest information on AO-27 from control operator Michael Wyrick,
N3UC (former N4USI), can be found at:
http://www.ao27.org

An AO-27 question-and-answer page is available on the AMSAT-NA web
site, with updates by Ray, W2RS. The URL is:
http://www.amsat.org/amsat/intro/ao27faq.html

[ANS thanks John, K6YK, for this week's AO-27 report]
[08292004]
=====

AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Semi-operational in sunlight.
Return to active status: June 21,2002

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A
145.975 to 145.925 MHz CW/USB Mode B
Beacon: 29.502 MHz, 145.972 MHz, 435.1 MHz, 2304.1 MHz

Emily, W0EEC has created a website to allow the users of AO-7 to record
contacts, observations and use of the satellite more effectively at:
http://www.emilyshouse.com/experthams/ao7/main.php
This includes the ability to log contacts.

Tim, K3TZ has written a program to decode AO-07 telemetry.
The program can be downloaded at:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

For more AO-7 info:
http://www.amsat.org/amsat/sats/n7hpr/ao7.html
[11142004]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Packet (APRS-style connections)
Digipeater: Active

The current Expedition 11 crew is:
Commander Sergei Krikalev
Flight Engineer John Phillips

Worldwide packet uplink: 145.990 MHz FM
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM
Doppler Shift is 10 KHz

Russian callsigns: RS0ISS, RZ3DZR
USA callsign: NA1SS
Packet station mailbox callsign: RS0ISS-11
Packet station keyboard callsign: RS0ISS-3
Digipeater callsign: ARISS

The ISS daily crew schedule can be found at:
http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is
NOT translated from Russian and posted.

More information is available at:
http://www.rac.ca/ariss
http://spaceflight.nasa.gov/station/reference/radio/
http://www.marexmg.org/fileshtml/unprotopage.html
http://www.issfanclub.com
http://oscar.dcarr.org/
[04242005]
NNNN
/EX

SB SAT @ AMSAT <W8ISS $ANS-191.S2
WSR 191 Part 2 07/09/2005

AMSAT NEWS SERVICE BULLETIN 191.S2 FROM AMSAT HQ
SILVER SPRING, MD, JULY 09, 2005
TO ALL RADIO AMATEURS
BID: $ANS-191.S2

AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - ON
FM REPEATER - ON

Analog voice downlink: 435.300 MHz FM
Analog voice uplink: 145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

4 July until ????
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital

We are going to run in this mode for a while to monitor the satellite after
the software reloading.

AO-51 is back operational in the mode listed below. Both the PBBS and the FM repeater are turned on and users are welcome to use the satellite. The software reloading has been completed. I spent a good deal of my holiday time this
week and weekend at home in order to download the data and then reload the satellite software to get it back up and running ASAP.

The software team has reviewed the data downloaded from the satellite memory. They indicate nothing out of the ordinary in their first review of the data, therefore the decision was made to reload the satellite software and get AO-51 active again. The software team will continue to review the information they have. Also, if we have another problem and the satellite resets itself again, we will download the memory and compare the results.

73 KE4AZN
Echo Command Team

[ANS thanks Mike, KE4AZN for the above information]
[07032005]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Non-Operational?????

Uplink/downlink: 145.827 MHz 1200 baud AX.25 AFSK via W3ADO-1
Aux/Uplink: 435.250 MHz 9600 baud via PCSAT-2 (off)
APRS Downlink: 144.390 MHz (Region 2)

This from Bob, WB4APR:
PCsat returned to negative-power-budget mode on 16 Feb 2005 and is not expect- ed to be restorable until the next full-sun period in the Fall when the southern Sun can better illuminate the south facing panel. Between now and then you are welcome to try to get a packet digipeated, but this will usually only work during mid-day passes in the Northern Hemisphere due to sun angles.

Question asked of Bob WB4APR recently on the amsat-bb:
Is it alive?? I was just looking at the pcsat.aprs.org page at Findu and it shows a lot of stations recently (within the last day) digipeating through it.

Bob's reply:
PCsat is always "alive", but can only muster enough
power to get out a complete packet when it is in
near mid-day sun in the Northern hemisphere the
higher the latitude the better in the summer.

Over the next 2 weeks PCsat is entering one of thoes
periods. The 20 or so stations you see on the LIVE
web page are probably unattended beacons. But
if u hear good packets on 145.825 from PCsat during
mid-day, go ahead and use it...

Fortunately it will be in 100% sun during FD, but
Unfortunately, all that sun is from the side and
misses the best solar panel. Experience has shown
it will be useless at that time.

PCSat is a 1200-baud APRS digipeater designed for use by stations using
hand-held or mobile transceivers. Downlinks feed a central web site at:
http://pcsat.aprs.org

The APRS-equipped PCSat was built by midshipmen from the U.S. Naval Academy
under the guidance of Bob Bruninga, WB4APR.
[07092005]
=====
CUTE-1
Catalog number: 27844
Launched: June 30,2003

Status: Operational

Uplink: ?
Downlink: 436.8375 CW
437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)
Cliff, K7RR reports:
In the latest Weekly Satellite Report, CUTE 1, #27844 is listed as OPER-
ATIONAL? Indeed it is very operational as a CUBESAT sending CW telemetry on
436.8345 MHz. At the July 7 2005, 23:45:20 pass over the Western USA:
CUTE 1 6B A4 xx 7F D7 66A8 4702 FF FF7C 65
CUTE 1 6C A6 59 80 D9 66A8 4702 FF FE7C B6

The June 30th KEPS were within ten seconds of AOS and LOS. It is an very
good object to practice tracking as the orbit and transmitter power are
similar to proposed CUBESATS awaiting launch this December. As a check for
Doppler correction, the lack of change in tone is an excellent indicator.

CUTE 1 is a Japanese (Tokyo Institute of Technology) one kilogram
nanosatellite that was launched by a Rokot rocket from Plesetsk at
14:15 UT on 30 June 2003. It carries a 100 mW beacon at 436.8375 MHz.
Initial orbital parameters were period 101.4 min, apogee 831 km, perigee
819 km, and inclination 98.7?.

For further info about CUTE-1 goto:
http://lss.mes.titech.ac.jp/ssp/cubesat/operation/Schedule_e.html

[ANS WSR wishes to thank Cliff, K7RR, for this week's information]
[07092005]
=====
GO-32 TECHSAT-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
(435.325 n/a - temperature problems)

Uplinks: 145.850, 145.890, 145.930 FM
1269.700, 1269.800, 1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[03132005]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink: 145.850 or 145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz
Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[05152005]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for
APRS users.

Uplink: 145.90 145.92 145.94 145.96 MHz FM
(using 1200-baud Manchester FSK)
Downlink: 437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon: 2401.1428 MHz
Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

A WOD collection of current graphics along with general information
and telemetry samples can be found at:
http://www.telecable.es/personales/ea1bcu
[05092004]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational?

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK).
approx. 10 days ON, 10 days OFF
Mode-S Beacon: 2401.500 MHz. ... OFF
UHFBeacon: 435.025 MHz. ... OFF

This from Clive, G3CWV:

There is a small chance that OSCAR-11 may have started transmitting
again between 08 June to 10 June.

The frequency is 145.826.

Any reception reports would be appreciated. Please reply direct to
Clive G3CWV (g3cwv@amsat.org), or post reports to AMSAT-BB.

[ANS thanks Clive, G3CWV for the above information]

More information on UO-11 OSCAR-11 can be found at:
http://www.users.zetnet.co.uk/clivew/
[06122005]
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/EX

SB SAT @ AMSAT <W8ISS $ANS-191.S3
WSR 191 Part 3 07/09/2005

AMSAT NEWS SERVICE BULLETIN 191.S3 FROM AMSAT HQ
SILVER SPRING, MD, JULY 09, 2005
TO ALL RADIO AMATEURS
BID: $ANS-191.S3

THE FOLLOWING ARE IN ORBIT BUT ARE
NON-OPERATIONAL AT THIS TIME:

POSAT-1 PO-28
Catalog Number: 22829
Launched : September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 435.075 MHz
435.275 MHz

Uplink: 145.925 MHz
145.975 MHz

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

More information of POSAT-1 can be found at:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
http://www.amsat.org/amsat/sats/n7hpr/po28.html
[08152004]
=====
AO-10 OSCAR 10
Catalog number: 14129

Launched: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon: 145.810 MHz (unmodulated carrier)

AO-10 has been locked into a Mode-B, 70-cm uplink and
2-meter downlink for several years.

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Non-operational

Uplink: 145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink: 435.812 MHz SSB
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Alberto E. Zagni - I2KBD reports on 02/13/05
The spacecraft is in MBL (safe mode) and is trasmitting just 6 channels
of telemetry. Temperatures and voltage are nominal, but there seems to
be a problem with the onboard receiver, refusing to accept commands.
The spacecraft was launched in 1993, thus nearing 12 years in orbit...

Best regards
Alberto E. Zagni - I2KBD
ITAMSAT Mission Director

More information of IO-26 can be found at:

http://joshua.micronet.it/english/itamsat/itamsathome.html
http://www.amsat.org/amsat/sats/n7hpr/io26.html
www.itamsat.org

[02132005]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon: 29.408 MHz
Robot: 29.454 MHz

[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB
Beacon: 145.860 MHz
Robot: 145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB
Beacon: 29.352 MHz (intermittent)
SSB meeting frequency: 29.380 MHz (unofficial)

John, KD6PAG reports on June 16, 2004 to ANS:
RS-15 beacon seemed to be back in the mode where it's a tone about 5 seconds
off and then 5 seconds on this morning.

ANS is looking for more confirmations of RS-15 coming back.

[ANS thanks John, KD6PAG for RS-15 information]
[06202004]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplink: 145.84 145.86 145.88 145.90 MHz FM
(using 1200-baud Manchester FSK)
CW downlink: 437.125 MHz
Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)
Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM
Broadcast Callsign: HLO1-11
BBS: HLO1-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a
non-operational status.
[05092004]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM (9600-baud FSK)
Downlink: 436.500 MHz FM
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink frequency (listed on the PanSat web site) 436.500 MHz

The satellite is not available for general uplink transmissions.

The Naval Postgraduate School developed PanSat. At the time of
launch, PanSat spread-spectrum digital transponders were to
be available to Amateur Radio operators along with software to utilize
this technology.

The satellite is still operating, however, the spread spectrum packet
radio portion never took place. The spacecraft is now beyond it's
initial 2-year mission life, but telemetry records are still being
downloaded.

For more information, visit the official PanSat web site at:
http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS has no further information]
[05232004]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlink: 437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA
web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplink V-band 145.840 - 145.990 MHz CW/LSB
U-band 435.550 - 435.800 MHz CW/LSB
L1-band 1269.250 - 1269.500 MHz CW/LSB
L2-band 1268.325 - 1268.575 MHz CW/LSB
S1-band 2400.350 - 2400.600 MHz CW/LSB
Downlink: S2-band 2401.225 - 2401.475 MHz CW/USB
K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon: 2401.323, 24,048.035
[05232004]

SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational

Uplink: to be released
Downlink: 437.075 MHz
Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]
=====

SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz
Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
callsign KE6QMD, as per the user service agreement located at the following
URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Semi-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

AO-49 (SAFIR-M) is a German amateur radio payload onboard the small German
scientific satellite "RUBIN-2".

AO-49 was built by the German amateur radio association "AATiS
e.V." (German
acronym for "Arbeitskreis Amateurfunk und Telekommunikation in der Schule",
which means: 'working group for amateur radio anand telecommunications in
schools'). AO-49 is designed as a "store and broadcast" system for APRS
based messages, dedicated for the use of schools in combination with the
existing WX-Net and planned buoy experiments in Germany.

No transmissions detected since the 1st of February 2003! It appears
AO-49 is not properly aligned to illuminate the solar panels. This
should end soon. Due to its orbit, AO-49 will be in a phase without
eclipses until 13Feb03.

Martin DG8UAU has written a small software program "SAFIR-M Decoder" to
allow decoding of the received DATA0 frames. It is available at:
http://amend.gmxhome.de in the section Aktuelles.

Details on AO-49 (SAFIR-M) can be found at:
http://amend.gmxhome.de

Information about AATiS e.V. is available at:
http://www.aatis.de
[05092004]
NNNN
/EX

SB SAT @ AMSAT <W8ISS $ANS-191.S4
WSR 191 Part 4 07/09/2005

AMSAT NEWS SERVICE BULLETIN 191.S4 FROM AMSAT HQ
SILVER SPRING, MD, JULY 09,2005
TO ALL RADIO AMATEURS
BID: $ANS-191.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE
PROPOSED FOR LAUNCH AT THIS TIME:

UCISAT ?O-??
Catalog number:
Proposed Launch Date: October 31, 2005

Status: Under Construction

Downlink: Submission in Progress
Uplink: Submission in Progress
Callsign: Submission in Progress

This from Matt Bennett, KF6RTB, UCISAT Communications Team Member:

Our website is www.ucisat.net .This is a new website, however, and doesn't
have the "Status" section active yet. Because of the growing interest in our
project, I'll push our webmaster to create updates (hopefully) on a week-to-
week basis. For now, the current status of the mission is as follows:

-Expected Launch Date: October 31st, 2005
-Frequency Allocation: Submission in Progress
-Construction Status: Sub-Assembly
[WSR to thank Matt Bennett, KF6RTB, for this week's report.]
[01302005]
=====
SSETI ?O-??
Catalog Number:
Proposed Launch Date: Early 2005

Status: Under Construction

>From Graham, G3VZV:
All work on the SSETI Express spacecraft has now been completed and the spacecraft has left its "birthplace" - a cleanroom at the ESA ESTEC facility in the Netherlands. The spacecraft has been packed into its special transport
container and is en-route to the launch site at Plesetsk in Northern Russia.

The launch date is still listed as 25th August (current approx lift off is 06:50UTC but this may be corrected later) and arrangements are underway for the launch to be shown live on ASTRA-1G - a Ku band satellite covering most of Europe and, hopefully, these transmissions will also be streamed at both high and low resolution on the internet.

Full details of all these media resources will be made known as soon as they are finalised as will details of the telemetry downloading and decoding software and the prizes being offered by ESA for the largest and also the first contributor!

AMSAT-UK will have a team member at the launch site during the launch campaign and intend to provide regular updates during the lead up to August 25th.

You can find more info about SSETI at:
http://sseti.gte.tuwien.ac.at/WSW4/

Looking at the website for the SSETI Express webcam
http://sseti.gte.tuwien.ac.at/WSW4/webcam.htm

[ANS thanks Graham, G3VZV for the above information]
[07032005]
=====
PCSAT2 ?0-??
Catalog Number:
Proposed Launch Date: May 2005

PCSAT2, which had previously been stowed in the Space Shuttle Discovery, arrived at Launch Complex 39B on 07 April 2005. PCSAT2 is now standing by ready to be launched on the first Space Shuttle return-to-flight mission.

PCSAT2 will use the same dual redundant AX.25 command and control system as used on PCsat (NO-44) offering 8 on/off commands, 5 telemetry channels and a serial port for the solar cell experiment telemetry. It also supports the Digital Comms Relay support of the PCsat/APRS mission. The packet uplink is on 145.825 MHz and the default downlinks are in the 435 MHz band to avoid any possible interference with existing ARISS missions. PCSAT2 will have quad redundant transmit inhibits for EVA safety issues, thus, it is also easy to turn off to avoid any issues with other UHF ARISS experiments that may be activated in the future. Also, the mission lifetime of PCSAT2 is only 1 year, because it is a sample-return mission, thus terminating any long term conflicts in spectrum management.

The PCSAT2 mission is intended as an opportunity to augment existing ARISS communications experiments with an external autonomous communications payload. In this regard, it has several potential uses:

* A UI-Digipeater to help ease congestion on the currently shared ARISS PMS (Packet Mail system)

* A PSK-31 transponder for multi-user communications to improve accessibility for schools and ARISS outreach programs.

* An FM Voice repeater for full duplex crew communications to facilitate crew-to-school ARISS contacts.

* Routine Telemetry on the spacecraft systems

For more information and pictures visit the PCSAT2 website at http://www.ew.usna.edu/~bruninga/pcsat2.html

[ANS thanks Bob, WB4APR for the above information]
[04102005}
=====
PHASE 3E ?O-??
Catalog Number:
Proposed Launch Date: Early 2006

Status: Under Construction

The AMSAT-Phase 3E satellite (P3E) is dedicated as communication and scientific platform for a highly elliptical orbit around Earth. The spacecraft will be created in a joint process together with the P5A Mars mission by an international team under leadership of AMSAT-DL and continues the successful series of AMSAT-Phase 3 satellites. Additionally the spacecraft will be a test bench for technology developped for the Mars mission. The main task of P3E is to act as communication platform for radio amateurs worldwide. A launch is planned in the period 2004 to 2006.

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/
[03272005]
=====
CP1 ?o-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N6CP
Proposed Transmit Frequency: 436.845
[03272005]
=====
CP2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.325
[03272005]
=====
HAUSAT1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: D90HP
Proposed Transmit Frequency: 437.465
[03272005]
=====
ICE Cube 1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: W2CXM
Proposed Transmit Frequency: 437.305
[03272005]
=====
ICE Cube 2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N2VR
Proposed Transmit Frequency: 437.425
[03272005]
=====
ION ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.505
[03272005]
=====
KUTEsat ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: KC0RMW
Proposed Transmit Frequency: 437.385
[03272005]
=====
MEROPE ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: K7MSU-1
Proposed Transmit Frequency: 145.980
[03272005]
=====
nCUBE1 ?O-??

Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
2407.25
[03272005]
=====
RINCON ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
437.345
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SEEDS ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: JQ1YGU
Proposed Transmit Frequency: 437.485
[03272005]
=====
Mea Huaka ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.405
[03272005]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satelite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

Via the ans mailing list at AMSAT.ORG courtesy of AMSAT-NA.
To subscribe, send "subscribe ans" to Majordomo@amsat.org

300. AWARD RULES "THE FATHERS OF THE RADIO"

Newsgroup: rec.radio.amateur.space
Date: 2005-07-11 20:41:33 UTC
From: Erminio Cioffi Squitieri <iz8ajq@amsat.org>
Message-ID: <1QAAe.11443$QV1.145514@twister2.libero.it>
Source record: 2014

AWARD "THE FATHERS OF THE RADIO"

RULES

The section ARI of Sala Consilina (SA) ITALY, has founded the permanent award "The fathers of the radio". The purpose of the diploma is to let know the names and the work of those than before, during and after the Our Guglielmo Marconi contributed to the invention and the development of the Radio.

General requirements - Awards are available to all amateurs and SWLs for worked or heard all the 11 countries of the following list where they were born the scientists / inventors who have contributed to to the invention or the development of the radio.

Bands e Modes - All the bands assigned to the Radio Amateur Service and all the modes are allowed, satellites and WARC included.

There are 4 versions of the award:

1) HF (you must have contacted all the 11 countries)
2) 50MHZ/VHF/UHF (are enough only 6 countries to claim the award)
3) SATELLITE (are enough only 6 countries to claim the award)

Countries list:

Canada VE (Reginald Fessenden)
Croazia 9A (Nikola Tesla)
Denmark OZ (Hans Christian Orsted)
France F (Edouard Branly)
Germany DF-DK-DL-DM (Heinrich Rudolf Hertz - Karl Ferdinand Braun - Adolf Slaby)
India VU (Jagdish Chandra Bose)
England G-M (Michael Faraday - Oliver Lodge)

Italy I (Guglielmo Marconi - Augusto Righi - Temistocle Calzecchi Onesti - Luigi Galvani)
Russia RA-RZ UA-UZ (Aleksandr Popov)
Scotland GM (James Clerk Maxwell)
USA A-K-N-W (Samuel Morse - David E. Hughes - Lee De Forest - Nathan Stubblefield)

To claim the Award the QSL cards are not required but they must be in possession of the applicant and could be requested anytime for checks.

The fee is 10 Euro or 12 Dollars. To receive the Award as registered mail please add 3 Euro or 4 Dollars.

Application forms must be sent to this address:

ARI SEZIONE SALA CONSILINA
CASELLA POSTALE N.11
CAP 84036 SALA CONSILINA (SA)
ITALY

For more informations you can contact the award manager IZ8AJQ Erminio
via email: iz8ajq@amsat.org

301. Space Shuttle STS-114

Newsgroup: rec.radio.amateur.space
Date: 2005-07-12 21:17:04 UTC
From: Tom <tom322@yahoo.com>
Message-ID: <db1c0j$46d$1@ss405.t-com.hr>
Source record: 2015

Hi,

Anyone knows on which frequencies i can hear Shuttle (not only radio amateur broadcast), but also their chat with ground control, ISS, etc.

Thanks

302. 2005 MAPLD International Conference

Newsgroup: rec.radio.amateur.space
Date: 2005-07-15 17:09:31 UTC
From: Roger Conroy <rogerconroy@nospam.hotmail.com>
Message-ID: <db92hagkb1@ctb-nnrp2.saix.net>
Source record: 2016

>
>
> Program Announced --- Registration Open
>
>
> 2005 MAPLD International Conference
>
> Ronald Reagan Building and International Trade Center
> Washington, D.C.
>
> September 7-9, 2005
>
>
>
> The 8th annual Military and Aerospace Programmable Logic Device
> (MAPLD) International Conference will present papers on programmable
> logic devices and technologies, digital engineering, and related
> fields, for military and aerospace applications. Devices,
> technologies, logic design, verification, flight applications, fault
> tolerance, reliability, radiation susceptibility, and encryption
> applications of programmable devices, processors, and adaptive
> computing systems in military and aerospace systems are topics for
> papers.
>
> For 2005, MAPLD will be expanded to 3 full days and will feature
> expanded "Birds of a Feather" Workshop Sessions. 165 oral and poster
> presentations are currently on the program. Four full-day seminars
> will be offered on September 6, 2005.
>
>
> KEY DATES AND LINKS
>
> Early Registration Ends: August 8, 2005
> Registration: http://klabs.org/mapld05/reg
> Conference Home Page: http://klabs.org/mapld05
> Late Submissions: Late papers will be accepted for the
> Poster and "Birds of a Feather" Workshop
> sessions only, on a space-avaiable basis.
> http://klabs.org/mapld05/
>
>
> We are planning an exciting program with presentations by Government,
> industry, academia, and consultants, including talks by distinguished
> Invited Speakers. This conference is open to US and foreign

> participation and is unclassified. For related information, please
> see the NASA Office of Logic Design Web Site (http://klabs.org).
>
>
> Special Talks Include:
>
> * Welcome and Opening Address
> Ralph Roe, NASA Engineering and Safety Center
> * Invited History Talk, "The Hubble Space Telescope"
> Steven Beckwith, Director, Space Telescope Science Institute
> * Invited Mishap Talk (new for 2005)
> "Computer Overload and The Apollo 11 Lunar Landing"
> Jack Garman (formerly NASA MSC/JSC)
> * Panel Session: "Why Are Space Stations So Hard?"
> Roger Launius, National Air and Space Museum
> Keith Cowing, Editor, NASA Watch
> William Dwyer, Engineer, Space Station Freedom and ISS
> and more ....
>
>
> Four Seminars for 2005:
>
> * Design Integrity
> * Device Failure Modes and Reliability
> * Reconfigurable High-Performance Computing
> * Space Plug-and-play Avionics (SPA) Technical Committee/Workshop
>
>
> Planned Technical Sessions, Oral, Poster and Birds-of-a-Feather (BOF):
>
> * Applications: Military & Aerospace I and II
> * Verification of High Reliability Designs
> * Radiation Effects and Mitigation Techniques
> * Logic Design and Processors
> * Reconfigurable Computing, Evolvable Hardware, and Security
> * Poster Session
> * BOF-L: Mitigation Methods for Reprogrammable Logic in the Space
> Radiation Environment
> * BOF-H: Reconfigurable Computing
> * BOF-J: PLD Failures, Analyses, and the Impact on Systems
> * BOF-S: NESC and Software
> * BOF-G: Digital Engineering and Computer Design - A Retrospective
> and Lessons Learned for Today's Engineers
> * BOF-W: Verification of Large Designs and Related Design
> Methodologies
>
>
> Reservations are being accepts for the Industrial & Gov't Exhibits:
> http://klabs.org/mapld05/exhibits/reservation_request_form.htm
>

>
> Industrial and Government participants include:
>
> NASA Office of Logic Design Synthworks
> Space Micro SRC Computers
> BAE Systems: Information and Aldec
> Electronic Warfare Systems
> Actel Corporation ATK Mission Research Corporation
> Aeroflex Colorado Springs Xilinx, Inc.
> Sigrity Mentor Graphics Corporation
> IEEE Aerospace and Electronics NASA Engineering and Safety Center
> Systems Society
> Nallatech Celoxica
> Northrop Grumman Corporation SEAKR Engineering
> Synplicity Aitech Defense Systems
> LSI Logic Andraka Consulting Group
> Pentek NRO: Director's Innovation
> Initiative
> Southwest Research Institute Star Bridge Systems
> Cray Alpha Data
> EM Photonics NASA MSFC Traveling Exhibits Program
> VMETRO MathStar
>
>
> For additional information:
>
> Conference home page: http://klabs.org/mapld05
>
> Richard B. Katz
> NASA Office of Logic Design
> mapld2005@klabs.org

303. NASA Comms. - Birmingham, Alabama?

Newsgroup: rec.radio.amateur.space
Date: 2005-07-15 20:06:50 UTC
From: Chris_Gaming <chris_gaming@charter.net>
Message-ID: <vHUBe.38$LC6.5@fe06.lga>
Source record: 2017

I have an AOR AR8200 MarkIII. I ordered it from the UK, so it's unblocked. This handheld receiver covers all frequencies from 500 KHz to 3GHz.

I live in Birmingham, Alabama; which is in north central Alabama. I have a simple question. Sitting here at home in my front yard, is there anyway for me to listen to the communications between Ground Control and the Shuttle and/or the Space Station? My exact location is Latitude: 33.57618 Longitude: -86.76385 I know I'm a newbie to this but I don't want to miss the chance to listen in on NASA communications if possible. BTW - I know a lot of websites broadcast the communications, but I want to use my own handheld receiver to listen to them, as opposed to just getting something relayed off a website. Thanks so much.

304. Re: NASA Comms. - Birmingham, Alabama?

Newsgroup: rec.radio.amateur.space
Date: 2005-07-15 23:11:46 UTC
From: Tom Randy <Sorry@spamsucks.net>
Message-ID: <2005071519085164440%Sorry@spamsucksnet>
Source record: 2018

On 2005-07-15 16:06:50 -0400, "Chris_Gaming" <chris_gaming@charter.net> said:

> I have an AOR AR8200 MarkIII. I ordered it from the UK, so it's unblocked.
> This handheld receiver covers all frequencies from 500 KHz to 3GHz.
>
> I live in Birmingham, Alabama; which is in north central Alabama. I have a
> simple question. Sitting here at home in my front yard, is there anyway for
> me to listen to the communications between Ground Control and the Shuttle
> and/or the Space Station? My exact location is Latitude: 33.57618
> Longitude: -86.76385 I know I'm a newbie to this but I don't want to miss
> the chance to listen in on NASA communications if possible. BTW - I know a
> lot of websites broadcast the communications, but I want to use my own
> handheld receiver to listen to them, as opposed to just getting something
> relayed off a website. Thanks so much.
>
Try these:

NASA: (frequencies in kHz, USB commonly)
NASA booster rocket recovery: 2622, 11407
NASA tracking: 3385, 3395, 6983, 14456
NASA tracking vessels: 5190
NASA booster recovery vessels: 5810
NASA aircraft: 6708, 6896, 7461, 7765
NASA Kennedy operations: 7675
USAF Cape Radio: 10780, 20390
NASA Pacific operations: 11205
NASA tracking (Ascencion Island): 20186, 20191

Edwards AFB: (frequencies in MHz)
116.4 ATIS
120.7 control tower
121.8 ground control
126.1, 127.8 approach control
133.65 approach/departure control
138.45 commandpost
149.925 security
162.6125 NASA ops
164.1 NASA
173.5875 fire
236.6 control tower
269.9 ATIS
290.3 departure control
318.1 tower
348.7 approach control
372.2 dispatchers

390.1 ground control

Kennedy: (MHz)
117.8 shuttle control
121.75, 126.3 ground control
126.65 weather
142.5, 143.04 cranes
148.455 NASA booster recovery
148.485 launch countdown/status
149.175 shuttle crawler
162.0125 NASA vessels
162.6125 NASA ops
163.4625, 163.4875 security
163.5125 security
163.5625 fire - primary
164.0 radiation checks
165.1875 check points
170.15 base operations
170.175 transportation
170.35 public relations
170.40 General Services Administration
171.15 maintenance/fuel
171.2625 camera tracking
173.175 security - gates
173.4375 medics
173.5625 fire/rescue
173.6625 safety units
173.6875 security - vans
173.7875 fire - secondary
284.0 ground control

Patrick AFB: (MHz)
118.4 approach/departure control
121.7 ground control
125.1 approach control
126.2 control tower
128.8 dispatcher
138.3 command post
273.5 ATIS
335.8 ground control
340.9 approach/departure control
344.6 weather
348.4 control tower
358.3 approach control
372.2 dispatchers

International emergency air frequencies (MHz)
121.5
243.0

Shuttle frequencies: (MHz)
296.8 primary
259.7 secondary
279.0 space suits

Communications and other stuff: (MHz)
1831.8 primary (USAF uplink, phase modulation)
1775.1 secondary
2106.4 primary (NASA uplink, phase modulation)
2041.9 secondary
2205.0, 2250.0 NASA downlink (FM)
2287.5 primary (NASA downlink, voice, phase mod)
2217.5 secondary

Contractors
Rockwell (Edwards)
2995.5, 3282.5, 3475.5, 5597.5, 10010.5, 17966.5 (kHz, USB)
122.8, 123.05, 123.35, 123.525, 462.925 (MHz)

Rockwell (Edwards/Kennedy)
123.475 (MHz)

McDonnell Douglas (Edwards)
123.3, 123.55 (MHz)

Com-Tech Associates (Kennedy)
151.955 (MHz)

IBM & Harris Corp. (Kennedy)
152.48 (MHz)

TWA (Kennedy)
154.515 (MHz)

Credit to:

http://www.panix.com/~clay/scanning/Frequencies/handy-info/shuttle.txt

--
PCs, like air-conditioners, are useless when you open Windows.

305. Re: Space Shuttle STS-114

Newsgroup: rec.radio.amateur.space
Date: 2005-07-16 01:36:22 UTC
From: Mike <Mike@nowhere.net>
Message-ID: <qwZBe.93086$wr.64749@clgrps12>
Source record: 2019

On Tue, 12 Jul 2005 18:48:01 -0500, Space Junkie wrote:

> Yes.

> Space Junkie.

You are a ass.

Mike

306. Re: NASA Comms. - Birmingham, Alabama?

Newsgroup: rec.radio.amateur.space
Date: 2005-07-16 03:24:18 UTC
From: **THE-RFI-EMI-GUY** <rhyolite@nettally.com>
Message-ID: <C5%Be.2399$t43.400@tornado.tampabay.rr.com>
Source record: 2020

Try these: I have heard the shuttle in AM mode and twice have heard
space suits. There is biomedical telemetry on the space suits so you can
hear a heartbeat. Rumor is the space suits are/have gone to 400 MHz
digital mode, so that may be no longer an option.

Shuttle frequencies: (MHz)
296.8 primary
259.7 secondary
279.0 space suits

Chris_Gaming wrote:

>I have an AOR AR8200 MarkIII. I ordered it from the UK, so it's unblocked.
>This handheld receiver covers all frequencies from 500 KHz to 3GHz.
>
>I live in Birmingham, Alabama; which is in north central Alabama. I have a
>simple question. Sitting here at home in my front yard, is there anyway for
>me to listen to the communications between Ground Control and the Shuttle
>and/or the Space Station? My exact location is Latitude: 33.57618
>Longitude: -86.76385 I know I'm a newbie to this but I don't want to miss
>the chance to listen in on NASA communications if possible. BTW - I know a
>lot of websites broadcast the communications, but I want to use my own
>handheld receiver to listen to them, as opposed to just getting something
>relayed off a website. Thanks so much.
>
>
>
>

--
Joe Leikhim K4SAT
"The RFI-EMI-GUY"

The Lost Deep Thoughts By: Jack Handey
Before a mad scientist goes mad, there's probably a time
when he's only partially mad. And this is the time when he's
going to throw his best parties.

307. WSR-198 AMSAT Weekly Satellite Status Report

Newsgroup: rec.radio.amateur.space
Date: 2005-07-18 14:10:57 UTC
From: JoAnne Maenpaa <wb9jej_no-spam@earthlink.net>
Message-ID: <RLOCe.691$6f.160@newsread3.news.atl.earthlink.net>
Source record: 2021

This report is organized into 4 parts.
Part 1 - operational analog amateur satellites.
Part 2 - operational digital amateur satellites.
Part 3 - non - operational satellites
Part 4 - proposed satellites

SB SAT @ AMSAT <W8ISS $ANS-198.S1
WSR 198 Part 1 07/17/2005

AMSAT NEWS SERVICE BULLETIN 198.S1 FROM AMSAT HQ
SILVER SPRING, MD, JULY 17, 2005
TO ALL RADIO AMATEURS
BID: $ANS-198.S1

VO-52 HAMSAT
Catalog Number: 28650
Launch Date: May 05,2005

Status: On orbit
Current Mode: U/V

Proposed frequencies:

Indian transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacom : 145.940MHz continue carier signal

Dutch transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacon : 145.860MHz 12WPM with CW message

HAMSAT has been assigned the OSCAR designation VO-52.
[06192005]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - OFF
FM REPEATER - DUAL V/U

Analog voice downlink: 435.300 MHz FM
435.150 mhz FM
Analog voice uplink: 145.880 mhz FM

145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

Current scheduled operating modes:
13 July
Dual FM Repeaters
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
FM Repeater, V/U
Uplink: 145.880 mhz FM
Downlink 435.150 mhz FM

18 July
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital

21 July
38k4 Digital on S Band in support of SSETI Satellite
38k4 Digital Downlink, V/S, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 2401.200 mhz FM, 38k4 PBP Digital

23 July
FM Repeater, V/S
Uplink: 145.920 mhz FM, 67hz PL Tone
Downlink 2401.200 mhz FM

18 July
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital

21 July
38k4 Digital on S Band in support of SSETI Satellite
38k4 Digital Downlink, V/S, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 2401.200 mhz FM, 38k4 PBP Digital

23 July
FM Repeater, V/S
Uplink: 145.920 mhz FM, 67hz PL Tone
Downlink 2401.200 mhz FM

[ANS thanks Mike, KE4AZN for the above information]
[07172005]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz (67.0 Hz PL tone) (See below for operating
procedures)
Downlink: 436.795 MHz

There have been unconfirmed reports on the amsat-bb remailer that So-50 has
shifted downlink frequency as much as 5khz up. This both from Europe.

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary)

1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm
the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT
the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window
will reset the 10 minute timer.
[09122004]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplink: 145.850 145.870 145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

John, N4QWL reports on July 16th, 2005:

Last evening I had a AOS to LOS qso with WI2W. FO-29 came up at 01:17z here
in FM07 and I found WI2W and we chatted until 01:33z. The satellite was at 2
degrees elevation when I finally heard him start to crackle a bit. What a
great QSO! To think that I watched this bird launch back in 1996 and it is

still working so well is a real thrill. I believe I still have the video. I might just look for it and watch it again. Boy do I love this satellite stuff!
Look for you all up there.

Please send the reception reports to lab2 'at' jarl.or.jp.
Please use the subject line: 'FO-29 reception report'.

Mineo, JE9PEL, has an FO-29 satellite telemetry analysis program that will automatically analyze all digital telemetry from the satellite (such as current, voltage and temperature). FO29CWTE is available at:
http://www.ne.jp/asahi/hamradio/je9pel/
[ANS-WSR wishes to thanks John, N4QWL for this week's report]
[07172005]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

The latest information on AO-27 from control operator Michael Wyrick, N3UC (former N4USI), can be found at:
http://www.ao27.org

An AO-27 question-and-answer page is available on the AMSAT-NA web site, with updates by Ray, W2RS. The URL is:
http://www.amsat.org/amsat/intro/ao27faq.html

[ANS thanks John, K6YK, for this week's AO-27 report]
[08292004]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Semi-operational in sunlight.
Return to active status: June 21,2002

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A
145.975 to 145.925 MHz CW/USB Mode B
Beacon: 29.502 MHz, 145.972 MHz, 435.1 MHz, 2304.1 MHz

Emily, W0EEC has created a website to allow the users of AO-7 to record contacts, observations and use of the satellite more effectively at:
http://www.emilyshouse.com/experthams/ao7/main.php
This includes the ability to log contacts.

Tim, K3TZ has written a program to decode AO-07 telemetry.
The program can be downloaded at:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

For more AO-7 info:
http://www.amsat.org/amsat/sats/n7hpr/ao7.html
[11142004]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: Packet (APRS-style connections)
Digipeater: Active

The current Expedition 11 crew is:
Commander Sergei Krikalev
Flight Engineer John Phillips

Worldwide packet uplink: 145.990 MHz FM
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM
Doppler Shift is 10 KHz

Russian callsigns: RS0ISS, RZ3DZR
USA callsign: NA1SS
Packet station mailbox callsign: RS0ISS-11
Packet station keyboard callsign: RS0ISS-3
Digipeater callsign: ARISS

Dave, IO80SM reports:
What a nice surprise to hear the I.S.S. UHF/VHF repeater operational earlier
this evening.

I heard an EI mobile and Jean F6HCC.
(Called you Jean, but guess you didn't hear me/it)

Nothing heard at all from the ISS during the last pass over the UK though.

This off the ARISS webpage: <
http://www.rac.ca/ariss/oindex.htm#New%20ARISS%20Operations > :
The ARISS program is pleased to announce that the amateur radio equipment
aboard the International Space Station is now operating in cross-band repeat
mode. We realize that many of you will miss the packet-operating mode.
However, cross-band repeat allows further experimentation of the ISS amateur
radio system

The downlink for this operating mode remains the same, so listen for the
station on 145.80 MHz. The new uplink frequency is 437.80 MHz. All
frequencies are subject to Doppler shifting. For further information on

working satellites and adjusting for Doppler shift, please review Emily
Clark's (W0EEC) excellent presentation on AMSAT's website:
http://www.amsat.org/amsat-new/information/faqs/Intro_sats.pdf

The ISS daily crew schedule can be found at:
http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is
NOT translated from Russian and posted.

More information is available at:
http://www.rac.ca/ariss
http://spaceflight.nasa.gov/station/reference/radio/
http://www.marexmg.org/fileshtml/unprotopage.html
http://www.issfanclub.com
http://oscar.dcarr.org/
[07172005]
NNNN
/EX

SB SAT @ AMSAT <W8ISS $ANS-198.S2
WSR 198 Part 2 07/17/2005

AMSAT NEWS SERVICE BULLETIN 198.S2 FROM AMSAT HQ
SILVER SPRING, MD, JULY 17, 2005
TO ALL RADIO AMATEURS
BID: $ANS-198.S2

AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - OFF
FM REPEATER - DUAL V/U

Analog voice downlink: 435.300 MHz FM
435.150 mhz FM
Analog voice uplink: 145.880 mhz FM
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

Current scheduled operating modes:
13 July
Dual FM Repeaters
FM Repeater, V/U

Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
FM Repeater, V/U
Uplink: 145.880 mhz FM
Downlink 435.150 mhz FM

18 July
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital

21 July
38k4 Digital on S Band in support of SSETI Satellite
38k4 Digital Downlink, V/S, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 2401.200 mhz FM, 38k4 PBP Digital

23 July
FM Repeater, V/S
Uplink: 145.920 mhz FM, 67hz PL Tone
Downlink 2401.200 mhz FM

[ANS thanks Mike, KE4AZN for the above information]
[07172005]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Non-Operational?????

Uplink/downlink: 145.827 MHz 1200 baud AX.25 AFSK via W3ADO-1
Aux/Uplink: 435.250 MHz 9600 baud via PCSAT-2 (off)
APRS Downlink: 144.390 MHz (Region 2)

This from Bob, WB4APR:
PCsat returned to negative-power-budget mode on 16 Feb 2005 and is not
expect- ed to be restorable until the next full-sun period in the Fall
when the southern Sun can better illuminate the south facing panel.
Between now and then you are welcome to try to get a packet digipeated,
but this will usually only work during mid-day passes in the Northern
Hemisphere due to sun angles.

Question asked of Bob WB4APR recently on the amsat-bb:
Is it alive?? I was just looking at the pcsat.aprs.org page at Findu
and it shows a lot of stations recently (within the last day) digipeating
through it.

Bob's reply:
PCsat is always "alive", but can only muster enough

power to get out a complete packet when it is in
near mid-day sun in the Northern hemisphere the
higher the latitude the better in the summer.

Over the next 2 weeks PCsat is entering one of thoes
periods. The 20 or so stations you see on the LIVE
web page are probably unattended beacons. But
if u hear good packets on 145.825 from PCsat during
mid-day, go ahead and use it...

Fortunately it will be in 100% sun during FD, but
Unfortunately, all that sun is from the side and
misses the best solar panel. Experience has shown
it will be useless at that time.

PCSat is a 1200-baud APRS digipeater designed for use by stations using
hand-held or mobile transceivers. Downlinks feed a central web site at:
http://pcsat.aprs.org

The APRS-equipped PCSat was built by midshipmen from the U.S. Naval Academy
under the guidance of Bob Bruninga, WB4APR.
[07092005]
=====
CUTE-1
Catalog number: 27844
Launched: June 30,2003

Status: Operational

Uplink: ?
Downlink: 436.8375 CW
437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)
Cliff, K7RR reports:
In the latest Weekly Satellite Report, CUTE 1, #27844 is listed as OPER-
ATIONAL? Indeed it is very operational as a CUBESAT sending CW telemetry on
436.8345 MHz. At the July 7 2005, 23:45:20 pass over the Western USA:
CUTE 1 6B A4 xx 7F D7 66A8 4702 FF FF7C 65
CUTE 1 6C A6 59 80 D9 66A8 4702 FF FE7C B6

The June 30th KEPS were within ten seconds of AOS and LOS. It is an very
good object to practice tracking as the orbit and transmitter power are
similar to proposed CUBESATS awaiting launch this December. As a check for
Doppler correction, the lack of change in tone is an excellent indicator.

CUTE 1 is a Japanese (Tokyo Institute of Technology) one kilogram
nanosatellite that was launched by a Rokot rocket from Plesetsk at
14:15 UT on 30 June 2003. It carries a 100 mW beacon at 436.8375 MHz.
Initial orbital parameters were period 101.4 min, apogee 831 km, perigee
819 km, and inclination 98.7?.

For further info about CUTE-1 goto:
http://lss.mes.titech.ac.jp/ssp/cubesat/operation/Schedule_e.html

[ANS WSR wishes to thank Cliff, K7RR, for this week's information]
[07092005]
=====
GO-32 TECHSAT-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
(435.325 n/a - temperature problems)
Uplinks: 145.850, 145.890, 145.930 FM
1269.700, 1269.800, 1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[03132005]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink: 145.850 or 145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz
Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[05152005]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for
APRS users.

Uplink: 145.90 145.92 145.94 145.96 MHz FM
(using 1200-baud Manchester FSK)
Downlink: 437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon: 2401.1428 MHz
Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

A WOD collection of current graphics along with general information
and telemetry samples can be found at:
http://www.telecable.es/personales/ea1bcu
[05092004]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational?

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK).
approx. 10 days ON, 10 days OFF
Mode-S Beacon: 2401.500 MHz. ... OFF
UHFBeacon: 435.025 MHz. ... OFF

This from Clive, G3CWV:

There is a small chance that OSCAR-11 may have started transmitting
again between 08 June to 10 June.

The frequency is 145.826.

Any reception reports would be appreciated. Please reply direct to
Clive G3CWV (g3cwv@amsat.org), or post reports to AMSAT-BB.

[ANS thanks Clive, G3CWV for the above information]

More information on UO-11 OSCAR-11 can be found at:
http://www.users.zetnet.co.uk/clivew/
[06122005]
NNNN
/EX

SB SAT @ AMSAT <W8ISS $ANS-198.S3
WSR 198 Part 3 07/17/2005

AMSAT NEWS SERVICE BULLETIN 198.S3 FROM AMSAT HQ
SILVER SPRING, MD, JULY 17, 2005
TO ALL RADIO AMATEURS
BID: $ANS-198.S3

THE FOLLOWING ARE IN ORBIT BUT ARE
NON-OPERATIONAL AT THIS TIME:

POSAT-1 PO-28
Catalog Number: 22829
Launched : September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 435.075 MHz
435.275 MHz

Uplink: 145.925 MHz
145.975 MHz

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

More information of POSAT-1 can be found at:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
http://www.amsat.org/amsat/sats/n7hpr/po28.html
[08152004]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon: 145.810 MHz (unmodulated carrier)

AO-10 has been locked into a Mode-B, 70-cm uplink and
2-meter downlink for several years.

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Non-operational

Uplink: 145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink: 435.812 MHz SSB
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Alberto E. Zagni - I2KBD reports on 02/13/05
The spacecraft is in MBL (safe mode) and is trasmitting just 6 channels
of telemetry. Temperatures and voltage are nominal, but there seems to
be a problem with the onboard receiver, refusing to accept commands.
The spacecraft was launched in 1993, thus nearing 12 years in orbit...

Best regards
Alberto E. Zagni - I2KBD
ITAMSAT Mission Director

More information of IO-26 can be found at:

http://joshua.micronet.it/english/itamsat/itamsathome.html
http://www.amsat.org/amsat/sats/n7hpr/io26.html
www.itamsat.org

[02132005]
=====
RS-12 RADIO SPORT RS-12

Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon: 29.408 MHz
Robot: 29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB
Beacon: 145.860 MHz
Robot: 145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB

Beacon: 29.352 MHz (intermittent)
SSB meeting frequency: 29.380 MHz (unofficial)

John, KD6PAG reports on June 16, 2004 to ANS:
RS-15 beacon seemed to be back in the mode where it's a tone about 5 seconds
off and then 5 seconds on this morning.

ANS is looking for more confirmations of RS-15 coming back.

[ANS thanks John, KD6PAG for RS-15 information]
[06202004]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplink: 145.84 145.86 145.88 145.90 MHz FM
(using 1200-baud Manchester FSK)
CW downlink: 437.125 MHz
Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)
Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM
Broadcast Callsign: HLO1-11
BBS: HLO1-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a
non-operational status.
[05092004]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM (9600-baud FSK)
Downlink: 436.500 MHz FM
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink frequency (listed on the PanSat web site) 436.500 MHz

The satellite is not available for general uplink transmissions.

The Naval Postgraduate School developed PanSat. At the time of
launch, PanSat spread-spectrum digital transponders were to
be available to Amateur Radio operators along with software to utilize
this technology.

The satellite is still operating, however, the spread spectrum packet
radio portion never took place. The spacecraft is now beyond it's
initial 2-year mission life, but telemetry records are still being
downloaded.

For more information, visit the official PanSat web site at:
http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS has no further information]
[05232004]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlink: 437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA
web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplink V-band 145.840 - 145.990 MHz CW/LSB
U-band 435.550 - 435.800 MHz CW/LSB
L1-band 1269.250 - 1269.500 MHz CW/LSB
L2-band 1268.325 - 1268.575 MHz CW/LSB
S1-band 2400.350 - 2400.600 MHz CW/LSB
Downlink: S2-band 2401.225 - 2401.475 MHz CW/USB
K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon: 2401.323, 24,048.035
[05232004]

SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational

Uplink: to be released
Downlink: 437.075 MHz
Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz
Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
callsign KE6QMD, as per the user service agreement located at the following
URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Semi-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

AO-49 (SAFIR-M) is a German amateur radio payload onboard the small German
scientific satellite "RUBIN-2".

AO-49 was built by the German amateur radio association "AATiS
e.V." (German
acronym for "Arbeitskreis Amateurfunk und Telekommunikation in der Schule",
which means: 'working group for amateur radio anand telecommunications in
schools'). AO-49 is designed as a "store and broadcast" system for APRS
based messages, dedicated for the use of schools in combination with the
existing WX-Net and planned buoy experiments in Germany.

No transmissions detected since the 1st of February 2003! It appears
AO-49 is not properly aligned to illuminate the solar panels. This
should end soon. Due to its orbit, AO-49 will be in a phase without
eclipses until 13Feb03.

Martin DG8UAU has written a small software program "SAFIR-M Decoder" to
allow decoding of the received DATA0 frames. It is available at:
http://amend.gmxhome.de in the section Aktuelles.

Details on AO-49 (SAFIR-M) can be found at:
http://amend.gmxhome.de

Information about AATiS e.V. is available at:
http://www.aatis.de
[05092004]
NNNN
/EX

SB SAT @ AMSAT <W8ISS $ANS-198.S4
WSR 198 Part 4 07/17/2005

AMSAT NEWS SERVICE BULLETIN 198.S4 FROM AMSAT HQ
SILVER SPRING, MD, JULY 17,2005
TO ALL RADIO AMATEURS
BID: $ANS-198.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE
PROPOSED FOR LAUNCH AT THIS TIME:

UCISAT ?O-??
Catalog number:
Proposed Launch Date: October 31, 2005

Status: Under Construction

Downlink: Submission in Progress
Uplink: Submission in Progress
Callsign: Submission in Progress

This from Matt Bennett, KF6RTB, UCISAT Communications Team Member:

Our website is www.ucisat.net .This is a new website, however, and doesn't
have the "Status" section active yet. Because of the growing interest in our
project, I'll push our webmaster to create updates (hopefully) on a week-to-
week basis. For now, the current status of the mission is as follows:

-Expected Launch Date: October 31st, 2005
-Frequency Allocation: Submission in Progress
-Construction Status: Sub-Assembly
[WSR to thank Matt Bennett, KF6RTB, for this week's report.]
[01302005]
=====
SSETI ?O-??
Catalog Number:
Proposed Launch Date: Early 2005

Status: Under Construction

SpaceDaily has a report about SSETI at:
http://www.spacedaily.com/news/internet-04zzzu.html

You can find more info about SSETI at:
http://sseti.gte.tuwien.ac.at/WSW4/

Looking at the website for the SSETI Express webcam
http://sseti.gte.tuwien.ac.at/WSW4/webcam.htm

[ANS thanks Graham, G3VZV and JoAnne, WB9JEJ for the above information]
[07172005]
=====
PCSAT2 ?0-??
Catalog Number:
Proposed Launch Date: May 2005

PCSAT2, which had previously been stowed in the Space Shuttle Discovery, arrived at Launch Complex 39B on 07 April 2005. PCSAT2 is now standing by ready to be launched on the first Space Shuttle return-to-flight mission.

PCSAT2 will use the same dual redundant AX.25 command and control system as used on PCsat (NO-44) offering 8 on/off commands, 5 telemetry channels and a serial port for the solar cell experiment telemetry. It also supports the Digital Comms Relay support of the PCsat/APRS mission. The packet uplink is on 145.825 MHz and the default downlinks are in the 435 MHz band to avoid any possible interference with existing ARISS missions. PCSAT2 will have quad redundant transmit inhibits for EVA safety issues, thus, it is also easy to turn off to avoid any issues with other UHF ARISS experiments that may be activated in the future. Also, the mission lifetime of PCSAT2 is only 1 year, because it is a sample-return mission, thus terminating any long term conflicts in spectrum management.

The PCSAT2 mission is intended as an opportunity to augment existing ARISS communications experiments with an external autonomous communications payload. In this regard, it has several potential uses:

* A UI-Digipeater to help ease congestion on the currently shared ARISS PMS (Packet Mail system)

* A PSK-31 transponder for multi-user communications to improve accessibility for schools and ARISS outreach programs.

* An FM Voice repeater for full duplex crew communications to facilitate crew-to-school ARISS contacts.

* Routine Telemetry on the spacecraft systems

For more information and pictures visit the PCSAT2 website at http://www.ew.usna.edu/~bruninga/pcsat2.html

[ANS thanks Bob, WB4APR for the above information]
[04102005}
=====
PHASE 3E ?O-??
Catalog Number:
Proposed Launch Date: Early 2006

Status: Under Construction

William Leijenaar, PE1RAH reports on July 16th, 2005:

Hi AMSATs,

I always like to inform the AMSATs public about my P3e work, but unfortunatly due to
some reasons there was not much time and nothing much to say...

However, now I am happy to announce that the my MODE-UV transponder design for P3e is ready at the P3e integration place in Marburg (Germany). About 4 weeks ago I was in Marburg before, where the transponder has been checked. Unfortunatly some unsure things were found in the design. The unsure things were about long term stability after many years in space.

At home in The Netherlands, I changed the design with some minor changes to have a secure long term stability. Finally I tested the transponder again and it performed well within the specifications. Again something learned for future transponder designs :o)

Last Wednesday I drove to AMSAT-DL P3e integrations place in Marburg again, and have my transponder again checked. In the beginning it seemed that the 70cm receiver lost 10dB in sensetivity. After some more measurements we find out that it was due to a bad attenuator we used for protection at the input.

Together with Karl Meinzer we looked for any problems, but so far we could see (without HELAPS) all was okay. In the afternoon I went back home again, this time without the MODE-UV.

Now the MODE-UV will get a new home, the home of P3e... :o)
I hope the transponder will work like its elder sister in AO-10, and you all will enjoy it for many years...

It was lots of work to get it this far, but I know it is for a good purpose...

For the latest project status update please visit the AMSAT-DL
P3-E web page:
http://www.amsat-dl.org/p3e/

[ANS-WSR wishes to thank William Leijenaar, PE1RAH for this week's report]
[07172005]
=====
CP1 ?o-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N6CP
Proposed Transmit Frequency: 436.845
[03272005]
=====
CP2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.325
[03272005]
=====
HAUSAT1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: D90HP
Proposed Transmit Frequency: 437.465
[03272005]
=====
ICE Cube 1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: W2CXM
Proposed Transmit Frequency: 437.305
[03272005]
=====
ICE Cube 2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N2VR
Proposed Transmit Frequency: 437.425
[03272005]
=====
ION ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.505

[03272005]
=====
KUTEsat ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: KC0RMW
Proposed Transmit Frequency: 437.385
[03272005]
=====
MEROPE ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: K7MSU-1
Proposed Transmit Frequency: 145.980
[03272005]
=====
nCUBE1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
2407.25
[03272005]
=====
RINCON ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
437.345
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====

SEEDS ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: JQ1YGU
Proposed Transmit Frequency: 437.485
[03272005]
=====
Mea Huaka ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.405
[03272005]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits.

Application forms are available from the AMSAT-NA Office.

This week's Weekly Satelite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

308. ANS-198 AMSAT Weekly News Service Bulletins

Newsgroup: rec.radio.amateur.space
Date: 2005-07-18 14:12:34 UTC
From: JoAnne Maenpaa <wb9jej_no-spam@earthlink.net>
Message-ID: <mNOCe.692$6f.195@newsread3.news.atl.earthlink.net>
Source record: 2022

AMSAT NEWS SERVICE
ANS-198

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* AMSAT-NA Symposium Registration Now Online
* AMSAT-UK Colloquium July 29-31
* SSETI Express July Update
* PCSAT2 Planned for Launch on STS-114
* Update Your Keps - ISS Orbit Modified
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* AMSAT Satellite Awards This Week
* P3E Mode-UV Transponder Milestone

SB SAT @ AMSAT $ANS-198.01
AMSAT-NA Symposium Registration Now Online

AMSAT News Service Bulletin 198.01
From AMSAT HQ SILVER SPRING, MD.
July 17, 2005
To All RADIO AMATEURS
BID: $ANS-198.01

Registration for the 2005 AMSAT Space Symposium is now available on-line. The Symposium will be held October 7-9 at the Holiday Inn Holidome in downtown Lafayette, LA. Information can be found on the Symposium web page at: http://www.amsat.org/amsat-new/symposium/

In addition to downloading the registration form, for the first time attendees can now register online through the AMSAT store. Registration forms will also be mailed out with the annual ballots for the AMSAT board of directors. Please see the AMSAT Store registration for more information: http://www.amsat-na.com/SymposiumReg.php

Registration for the Annual Banquet, the Friday Night Shrimp Boil and the Sunday Swamp Tour can all be done at the time you register for the Symposium.

[ANS thanks Emily, W0EEC for the above information]

/EX

SB SAT @ AMSAT $ANS-198.02
AMSAT-UK Colloquium July 29-31

AMSAT News Service Bulletin 198.02
From AMSAT HQ SILVER SPRING, MD.
July 17, 2005
To All RADIO AMATEURS
BID: $ANS-198.02

Huygens - A First Look at Titan

AMSAT-UK is privileged to have Professor John Zarnecki Principal Investigator for the Surface Science Package on Huygens giving the keynote presentation at the International Space Colloquium to be held at the University of Surrey, Guildford, England from 29th - 31st July.

Professor John Zarnecki's presentation on Friday July 29th will describe the journey of the Huygens probe as well as its final dramatic plunge to the surface of Titan.

Day passes to the event cost £12:50. If required, overnight accom-
odation and meals at the University are available. For further
details contact Sophie Haigh; Email: s.haigh@sstl.co.uk
Tel: +44 (0)1483 689888

Guildford is close to both London-Heathrow and London-Gatwick airports.

For full details of the programme see:
http://www.uk.amsat.org/Colloquium/

[ANS thanks Jim, G3WGM, and Trevor, M5AKA for the above information]

/EX

SB SAT @ AMSAT $ANS-198.03
SSETI Express July Update

AMSAT News Service Bulletin 198.03
From AMSAT HQ SILVER SPRING, MD.
July 17, 2005
To All RADIO AMATEURS
BID: $ANS-198.03

All work on the SSETI Express spacecraft has now been completed and thespacecraft has left its "birthplace" - a cleanroom at the ESA ESTEC facility in the Netherlands. The spacecraft has been packed into its special transport container and is en-route to

the launch site at Plesetsk in Northern Russia.

The launch date is still listed as 25th August currently at 06:50 UTC. Arrangements are underway for the launch to be shown live on ASTRA-1G, a Ku band satellite covering most of Europe. Hopefully, these transmissions will also be streamed at both high and low resolution on the internet.

Full details of all these media resources will be made known as soon as they are finalised. Details of the telemetry downloading and decoding software will be released.

AMSAT-UK will have a team member at the launch site during the launch campaign and intend to provide regular updates during the lead up to August 25th.

See the latest SSETI news on the ESA web page at:
http://www.esa.int/esaCP/SEMPQH6DIAE_index_0.html

[ANS thanks Graham G3VZV for the above information]

/EX

SB SAT @ AMSAT $ANS-198.04
PCSAT2 Planned for Launch on STS-114

AMSAT News Service Bulletin 198.04
From AMSAT HQ SILVER SPRING, MD.
July 17, 2005
To All RADIO AMATEURS
BID: $ANS-198.04

When STS-114 lifts off it will be carrying an amateur radio payload called MISSE5/PCSAT2. This will be placed on the exterior of the ISS during the third space walk of the mission. More information is available on-line at:
http://web.usna.navy.mil/~bruninga/pcsat2.html

Dave Johnson, G4DPZ, is developing the PCSat2 telemetry web site:
http://www.pcsat2.info

This late-beta test page is currently displaying channel telemetry generated by a simulator which refreshes every 10 seconds approximating the speed when it is under command conditions.

Additional items currently planned include:
o Graphical Channel History
o WOD feed (csv file probably)
o League table of telemetry providers
o RealTime Eclipse status

PCSAT2 is attached to the ISS and so its operations must be in cooperation with the ARISS communications suite to minimize any mutual interference and to coordinate activities. Here are the

capabilities of the PCSAT2 payload:

PCSAT SYSTEM A:

435.275 PCSAT2 DOWNLINK basic 1200 baud telemetry (nominally 1
packet per minute)
435.275 PCSAT2 DOWNLINK User packet digipeater from uplink on 145.825
435.275 PCSAT2 DOWNLINK Occasional user PSK-31 continuous downlink
(7 minutes max each time)

145.825 PCSAT2 UP/DOWN User packet digipeater up/down on 145.825

PCSAT SYSTEM B:

437.975 PCSAT2 DOWNLINK periodic Solar Cell data and PCSAT2
telemetry at 9600 baud
437.975 PCSAT2 DOWNLINK TNC-B command downlink at 1200 baud
437.975 PCSAT2 DOWNLINK User Voice Repeater with VHF uplink

[ANS thanks Bob, WB4APR and Dave, G4DPZ for the above information]

/EX

SB SAT @ AMSAT $ANS-198.05
Update Your Keps - ISS Orbit Modified

AMSAT News Service Bulletin 198.05
From AMSAT HQ SILVER SPRING, MD.
July 17, 2005
To All RADIO AMATEURS
BID: $ANS-198.05

If you have not updated your Keplerian Elements recently your
tracking of the ISS may be off.

In preparation of the Space Shuttle's Return to Flight the ISS
received one final reboost to increase the Station's altitude
for its upcoming rendezvous with Space Shuttle Discovery.

Last week the engines of a Progress spacecraft docked to the Station
were commanded to burn for 7 minutes and 20 seconds, boosting the
altitude of the Station nearly 4 miles. This second and final reboost
puts the Station into position for rendezvous opportunities beginning
on the third flight day during most of Discovery's July 13-31 launch
window.

[ANS thanks Jacques van Oene for the above information]

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SB SAT @ AMSAT $ANS-198.06
ARISS Status - Week of July 11, 2005

AMSAT News Service Bulletin 198.06
From AMSAT HQ SILVER SPRING, MD.

July 17, 2005
To All RADIO AMATEURS
BID: $ANS-198.06

1. Upcoming School Contacts

The shuttle STS-114 Return to Flight mission is slated to launch in July and to dock with the ISS. School contacts have been submitted for approval, and will resume as soon as the ISS schedule allows.

2. SuitSat Status

The ARISS-Russia team received the U.S. supplied hardware, and is working on its integration and testing. The team is currently compiling the documentation necessary for certifying the SuitSat hardware for flight.

3. PCSAT2/MISSE5 to Fly on STS-114

As part of an educational outreach program, students at the United States Naval Academy, in collaboration with the DOD and ARISS, and under the direction of Bob Bruninga, WB4APR, designed and developed PCSAT2. This payload will be carried on a Materials International Space Station Experiment (MISSE5) on a Passive Experiment Container (PEC). The PEC (suitcase) will be opened and will carry DOD solar cells on the front side, facing the sun, and the back side will carry the amateur satellite communications system which will include Automatic Position Reporting System (APRS) Packet, FM voice repeater, and 10m PSK-31 transponder. The payload will be launched on the Return to Flight STS-114 mission. It will be deployed via an EVA as an external payload on the ISS. It will be turned on during the EVA, and become operational 8.5 hours later when its safety timer allows. This project is described in detail on Bruninga's website, "PCSAT2 - External ISS Experiment in the Amateur Satellite Service."
See: <http://www.ew.usna.edu/~bruninga/pcsat2.html>

4. NES Teacher Workshop
A NASA Explorer School Satellite Communication Class will be held at Goddard Space Flight Center during the week of July 18. Orbital elements, how to set up a station, and how to communicate with the ISS will be addressed. In addition, the ARISS -U.S. team at GSFC may schedule some amateur radio time to demonstrate the usefulness of radios in the classroom.

5. Astronaut Training

On Friday, July 8, Kenneth Ransom gave astronaut John Grunsfeld, KC5ZTF, an overview of the ARISS radio system and operations. Grunsfeld is a backup for the Expedition 13 crew.

6. ARISS International Meeting, Guilford, U.K.

Preparations continue for the ARISS International Face-to-Face Meeting which will be held at the University of Surrey in Guilford, U.K. Delegates are currently drafting the agenda for the August 1 - 2 conference.

7. ISS Ham Training Manual

ARISS member Dave Taylor has been working on an SSTV manual for the ISS Ham system. He has submitted the final version to Kenneth Ransom at JSC to be uplinked to the ISS.

8. Space Tourist Resumes Training

Greg Olsen of Sensors Unlimited has resumed his training for spaceflight. He made arrangements through Space Adventures to begin training last fall and stopped due to a medical condition, but has now returned to Star City and is training with the Expedition 12 crew. As the next space tourist, Olsen has expressed an interest in participating in several ARISS school contacts.

[ANS thanks Carol Jackson, KB3LKI, for the above information]

/EX

SB SAT @ AMSAT $ANS-198.07
AMSAT-Italia Developing Ionosfera

AMSAT News Service Bulletin 198.07
From AMSAT HQ SILVER SPRING, MD.
July 17, 2005
To All RADIO AMATEURS
BID: $ANS-198.07

AMSAT-Italia is currently developing the "Ionosfera" project which aims at supporting the DX Community in predicting the ionosphere propagation conditions.

The project is developed in the framework of European Space Agency's (ESA) programme on "Space Weather" and can be visited at: http://esa-spaceweather.net/sda/ionosfera/index2.htm

Please have a look, make suggestions and forward the link to other potentially interested people.

One of the things we are trying to do is to correlate the DX activity with the various Space Weather indices. For this we are looking for HF DX logs (best in electronic files) covering the period 01-Sept-2003 through 30-Apr-2005.

Should you or your friends be active on HF DX, could you please support us by providing as many as possible log files? In addition to analysing the data globally, we thank our various contributors by characterising their own location with respect to the Space Weather conditions.

[ANS thanks Florio, IW2NMB, coordinator of the Ionosfera project for the above information]

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SB SAT @ AMSAT $ANS-198.08
Delft University of Technology Announces Delfi-C3

AMSAT News Service Bulletin 198.08
From AMSAT HQ SILVER SPRING, MD.
July 17, 2005
To All RADIO AMATEURS
BID: $ANS-198.08

A group of students from the Department of Aerospace Engineering and Electrical Engineering of Delft University of Technology is developing a new Dutch satellite. Scheduled for launch in 2006, it will be the first university satellite to be flown for the Netherlands.

The Delfi-C3 communications subsystem will operate in the VHF and UHF amateur radio frequency bands enabling radio amateurs worldwide to receive satellite data using a modest equipment setup.

The EEMCS Faculty is developing an advanced transceiver, combining miniaturization with a high DC to RF efficiency and the capability to adapt to different channel conditions. Since transmitting payload data is of utmost importance for the whole mission, the communications sub-system is set up as a dual redundant system, with an AMSAT platform as backup.

Besides transmitting telemetry data, both systems are capable of providing a linear transponder service to the amateur radio community as a returned favor for use of amateur frequencies and their assistance with the telemetry data collection.

For all interested radio amateurs and other people related to the project the team has made the first Delfi-C3 newsletter available at http://www.delfic3.nl/newsletter

You can subscribe to this issue of the newsletter and future ones.

[ANS thanks Wouter Jan Ubbels, PE4WJ, of the Delfi-C3 team for the above information]

/EX

SB SAT @ AMSAT $ANS-198.09
Goddard Amateur Radio Club Shuttle Retransmissions

AMSAT News Service Bulletin 198.09
From AMSAT HQ SILVER SPRING, MD.
July 17, 2005
To All RADIO AMATEURS
BID: $ANS-198.09

The Goddard Amateur Radio Club, WA3NAN retransmits shuttle radio traffic.
Shuttle retransmission frequencies used include the following:
Band Frequency +/- 5 kHz, QRM or Nets
80m 3.860 MHz
40m 7.185 MHz
20m 14.295 MHz
15m 21.395 MHz
19m 28.650 MHz
2m 147.450 MHz

[ANS thanks John, N3KHK, and the Goddard Amateur Radio Club for the above information]

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SB SAT @ AMSAT $ANS-198.10
Membership Challenge Successful, Thank-you WA6FWF and KE9V

AMSAT News Service Bulletin 198.10
From AMSAT HQ SILVER SPRING, MD.
July 17, 2005
To All RADIO AMATEURS
BID: $ANS-198.10

Barry Baines, WD4ASW, AMSAT's VP of Marketing and User Services, reports the membership challenge made by Kevin Schuchmann, WA6FWF to match new membership dues with an equal contribution (up to a total of $1,000.00) in a two week period has been met. A total of 23 AMSAT memberships have been generated since Kevin's appeal on June 27. Most of these are new members (15). However, the other eight individuals are former members with expiration dates going as far back as 10-12 years.

Many thanks to Kevin for promoting this membership appeal and welcome aboard to those that have joined AMSAT in the past two weeks.

Barry commended Jeff Davis, KE9V, for his support in the AMSAT member-ship drive. Barry wrote, "Many thanks for your support of AMSAT in a very imaginative and helpful way. When Kevin Schuchmann, WA6FWF, initiated the Membership Challenge that resulted in 23 AMSAT member-ships in a two-week period, you stepped forward with a commitment to cover the cost of providing a copy of the AMSAT publication "Getting Started with Amateur Satellites" (written by Gould Smith, WA4SXM) to each individual who became an AMSAT member as a result of the Challenge. Not only did your actions reinforce the desire to help our newest members, but it serves as a great example of an AMSAT member taking the initiative to come up with a great way to build support for AMSAT. Thank you for taking this opportunity to make a difference for AMSAT."

[ANS thanks Barry, WD4ASW, for the above information]

/EX

SB SAT @ AMSAT $ANS-198.11
AMSAT Satellite Awards This Week

AMSAT News Service Bulletin 198.11
From AMSAT HQ SILVER SPRING, MD.
July 17, 2005
To All RADIO AMATEURS
BID: $ANS-198.11

Bruce Paige, KK5DO, AMSAT Director Contests and Awards, reports this week, congrats go out to all of the following:

Howard Stephenson, K6IA, 51 on 51 Award #29

To see all the awards visit http://www.amsat.org.

[ANS thanks Bruce, KK5DO, for the above information]

/EX

SB SAT @ AMSAT $ANS-198.12
P3E Mode-UV Transponder Milestone

AMSAT News Service Bulletin 198.12
From AMSAT HQ SILVER SPRING, MD.
July 17, 2005
To All RADIO AMATEURS
BID: $ANS-198.12

William, PE1RAH, developer of the Dutch transponder on the Indian HAMSAT, reports, "I am happy to announce that my MODE-UV transponder design for P3E has completed its initial testing and has been delivered to AMSAT-DL's integration lab at Marburg, Germany. I hope the transponder will work like its elder sister on AO-10, and you all will enjoy it for many years."

[ANS thanks William, PE3RAH, for the above information]

/EX

73,
This week's ANS Editor,
JoAnne Maenpaa, WB9JEJ
WB9JEJ at amsat dot org

309. Paranormal website

Newsgroup: rec.radio.amateur.space
Date: 2005-07-19 16:47:42 UTC
From: artbellfan <artbellfan8@yahoo.com>
Message-ID: <1121791662.595398.41730@o13g2000cwo.googlegroups.com>
Source record: 2023

Paranormal Website

http://www.shadowpeoplebooks.com

310. UHF vertical for amsats

Newsgroup: rec.radio.amateur.space
Date: 2005-07-24 15:03:33 UTC
From: philnyc <philnyc22@hotmail.com>
Message-ID: <1122217413.631888.155670@g47g2000cwa.googlegroups.com>
Source record: 2024

Hello everyone,

I would greatly appreciate any advice in subject of choosing a vertical antenna for satellite operations. I can hear VO-52 / FO-29 5-7 / 5-9 using my mobile antenna NR 770 H fix on a mast 9ft above the ground.

I am cosidering builing a Super J-Pole antenna.
http://www.n7qvc.com/amateur_r adio/copper.html

Do you think that this vertical will be sufficient to bounce 50W of signal back to Earth of the satellite ? If not , what other homebrew antenna will be fine for this purpose ?

Thank you for your helpful response .

Phil

311. Re: UHF vertical for amsats

Newsgroup: rec.radio.amateur.space
Date: 2005-07-24 23:57:12 UTC
From: rocketeer <rocketeer@hotmail.com>
Message-ID: <42E42AD8.8040201@hotmail.com>
Source record: 2025

Check out K5OE's site:
http://members.aol.com/k5oe/
"eggbeater" style antennas.

Have fun,

rocketeer

philnyc wrote:

>Hello everyone,
>
>I would greatly appreciate any advice in subject of choosing a vertical
>antenna for satellite operations. I can hear VO-52 / FO-29 5-7 / 5-9
>using my mobile antenna NR 770 H fix on a mast 9ft above the ground.
>
>I am cosidering builing a Super J-Pole antenna.
>http://www.n7qvc.com/amateur_r adio/copper.html
>
>Do you think that this vertical will be sufficient to bounce 50W of
>signal back to Earth of the satellite ? If not , what other homebrew
>antenna will be fine for this purpose ?
>
>Thank you for your helpful response .
>
>Phil
>
>
>

312. ANS-205 AMSAT Weekly News Bulletin

Newsgroup: rec.radio.amateur.space
Date: 2005-07-25 15:22:22 UTC
From: JoAnne Maenpaa <wb9jej_no-spam@earthlink.net>
Message-ID: <Os7Fe.16834$aY6.9245@newsread1.news.atl.earthlink.net>
Source record: 2026

AMSAT NEWS SERVICE
ANS-205

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* ARISS Status Report
* SSETI Express readied for August 25 Launch
* Earliest Shuttle Launch Posibility
* AMSAT Symposium
* Ballots in the mail
* Crossband Repeater on ISS

SB SAT @ AMSAT $ANS-205.01
ISS Status Report 7/18/05

AMSAT News Service Bulletin 205.01
From AMSAT HQ SILVER SPRING, MD.
July 18, 2005
To All RADIO AMATEURS
BID: $ANS-205.01

ARISS Status
July 18, 2005

1. Upcoming School Contacts

The shuttle STS-114 Return to Flight mission has been delayed. School contacts have been submitted for approval, and will resume as soon as the ISS schedule allows.

2. NES Teacher Workshop
A NASA Explorer School (NES) Satellite Communication Class will be held at Goddard Space Flight Center this week. Two one hour sessions have been scheduled for the teachers with ARISS team members. An introduction to Amateur Radio and ARISS will be given during the first hour, and orbital elements, prediction programs, and how to track the ISS and shuttle will be addressed during the second session. There is the possibility of an ARISS contact being scheduled for the teachers during

the week (depending on when the shuttle launches) which will give them an idea of how to incorporate the ARISS program in their own curricula.

3. SuitSat Status

The ARISS-Russia team continues to work on the SuitSat hardware integration and testing. The team is compiling documentation necessary for flight certification of the SuitSat hardware.

4. ARRL Article on Return to Flight Mission

ARRL ran an article on the STS-114 Return to Flight mission which includes the PCSAT2 status. The story, "Amateur Licensees among Shuttle Discovery Crew; PCSat2 Installation Set," may be found at: http://www.arrl.org/news/stories/2005/07/12/3/?nc=1

5. PCSAT2/MISSE5 to Fly on STS-114

PCSAT2 will fly on the Return to Flight STS-114 mission, which may launch this week. It will be deployed via an EVA as an external payload on the ISS. This project is described in detail on Bruninga's website, "PCSAT2 - External ISS Experiment in the Amateur Satellite Service." See: http://www.ew.usna.edu/~bruninga/pcsat2.html

6. ARISS International Meeting, Guildford, U.K.

Preparations continue for the ARISS International Face-to-Face Meeting which will be held at the University of Surrey in Guildford, U.K. The agenda for the August 1 - 2 conference has been released. Information on the AMSAT-UK Colloquium and the ARISS International Meeting may be found on the following website: http://www.uk.amsat.org/Colloquium/default.php

[ANS thanks Carol Jackson, KB3LKI for the above information]

/EX

SB SAT @ AMSAT $ANS-205.02
SSETI Express readied for August 25 Launch

AMSAT News Service Bulletin 205.02
From AMSAT HQ SILVER SPRING, MD.
July 24, 2005
To All RADIO AMATEURS
BID: $ANS-205.02

ESA's latest update on the SSETI Express satellite due for launch August 25th can be seen at:

http://www.southgatearc.org/news/jul2005/sseti_express_update.htm

There will be a presentation on SSETI Express at the AMSAT-UK International Space Colloquium, July 29 - 31st. All Radio Amateurs and SWL's are welcome to attend.

Web: http://www.uk.amsat.org/Colloquium/
Note: The Uppercase "C" in Colloquium is needed.

There is also a nice mention of Graham's, G3VZV, involvement with
SSETI at Spacedaily.com ...

- SSETI Express Sets Off
http://www.spacedaily.com/news/microsat-05i.html

[ANS thanks Trevor, M5AKA, and Spacedaily.com for the above information]

/EX

SB SAT @ AMSAT $ANS-205.03
Shuttle Launch earliest possibility is next week

AMSAT News Service Bulletin 205.03
From AMSAT HQ SILVER SPRING, MD.
July 19, 2005
To All RADIO AMATEURS
BID: $ANS-205.03

NASA'S SHUTTLE LAUNCH AT LEAST ONE WEEK AWAY

NASA is targeting Tuesday, July 26 as the earliest possible date to
launch the Space Shuttle Discovery on the Return to Flight mission
(STS-114). The determination was made during Monday's meeting of the
Mission Management Team (MMT) at Kennedy.

The MMT reviewed efforts by teams of engineers. The engineers are
working through a troubleshooting plan to address an issue with a liquid
hydrogen low-level fuel sensor circuit. The sensor circuit failed a
routine pre-launch check during the countdown July 13, delaying
Discovery's first launch attempt.

NASA is still working to launch Discovery by the end of the July window
that extends to the 31st. A dozen teams, with hundreds of engineers
across the country, are expected to complete their battery of tests by
Wednesday. While they have not isolated a cause of the sensor circuit
failure, they have eliminated a number of possibilities. If the
remaining tests are inconclusive, NASA could reload the External Tank
with super-cooled propellants to see how the sensor circuit behaves. The
tanking could be done as a test or as part of an actual launch countdown.

Commander Eileen Collins and her six Discovery crew mates come out of
quarantine today for one day off. They resume quarantine and training
later this week.
For the latest information about STS-114 on the Web, visit:

http://www.nasa.gov/returntoflight

[ANS thanks Arthur, N1ORC for the above information]

/EX

SB SAT @ AMSAT $ANS-205.04
AMSAT Symposium

AMSAT News Service Bulletin 205.04
From AMSAT HQ SILVER SPRING, MD.
July 24, 2005
To All RADIO AMATEURS
BID: $ANS-205.04

Space! Ham radio goes there and you can join in the fun! Come to the AMSAT Technical Symposium and Annual Meeting this fall in lovely Lafayette, Louisiana. Education and technical sessions begin on Friday, the 7th of October. Technical, field ops, and the IARU forum follow through Sunday the 9th of October. Enjoy the best of Acadian Louisiana with Friday's "Shrimp Boil," Saturday's Banquet with great prizes, and Sunday's "Swamp Tour."

Register on line! For more, see:
http://www.amsat.org/amsat-new/symposium/.

[ANS thanks JoAnne, WB9JEJ, for the above information]

/EX

SB SAT @ AMSAT $ANS-205.05
Ballots in the mail

AMSAT News Service Bulletin 205.05
From AMSAT HQ SILVER SPRING, MD.
July 24, 2005
To All RADIO AMATEURS
BID: $ANS-205.05

AMSAT-NA BOARD OF DIRECTORS BALLOTS IN THE MAIL

Martha at AMSAT HQ reports that the AMSAT-NA Board of Directors ballots have been mailed. The ballot must be returned by the close of business, September 15, 2005.

The application forms for the Symposium are also included in this mailing. Get yours in early and join the fun.

[ANS thanks Martha at AMSAT HQ for the above information]

/EX

SB SAT @ AMSAT $ANS-205.06
Crossband Repeater on ISS

AMSAT News Service Bulletin 205.06
From AMSAT HQ SILVER SPRING, MD.
July 24, 2005
To All RADIO AMATEURS
BID: $ANS-205.06

ISS CROSSBAND REPEATER IS ON

The ISS cross-band or U/V repeater is ON.
Downlink is 145.800
Uplink is 437.800 ± 10 KHz doppler

Please keep in mind that the crew may be listening and may pick up their microphone.

Complete instructions on the Doppler correction for the ISS crossband repeater are posted at http://www.rac.ca/ariss/.

The ISS repeater does not use any PL to access the machine. Just remember to do the Doppler correction for the 70cm band especially.

Charlie, AJ9N, one of the ARISS mentors wrote, "The better the antenna the better you will be able to access the repeater and enjoy longer time per pass. Yes, you can get in with a simple vertical, but it may be only for 3 or 4 minutes of a 10 minute pass".

Cor, PD0RKC, has put together a lot of useful info for ISS and how to work ISS's repeater on his webpage:
http://pd0rkc.mine.nu/issdoppler.html

[ANS thanks Charlie, AJ9N, and Scott, WA6LIE, for the above information]

/EX

73,
This week's ANS Editor,
Dee Interdonato, NB2F
nb2f at amsat dot org

313. WSR-205 AMSAT Weekly Satellite Report

Newsgroup: rec.radio.amateur.space
Date: 2005-07-25 15:23:19 UTC
From: JoAnne Maenpaa <wb9jej_no-spam@earthlink.net>
Message-ID: <Ht7Fe.16835$aY6.2608@newsread1.news.atl.earthlink.net>
Source record: 2027

```
This report is organized into 4 parts.
Part 1 - operational analog amateur satellites.
Part 2 - operational digital amateur satellites.
Part 3 - non - operational satellites
Part 4 - proposed satellites

SB SAT @ AMSAT <W8ISS $ANS-205.S1
WSR 205 Part 1 07/25/2005

AMSAT NEWS SERVICE BULLETIN 205.S1 FROM AMSAT HQ
SILVER SPRING, MD, JULY 24, 2005
TO ALL RADIO AMATEURS
BID: $ANS-205.S1

VO-52 HAMSAT
Catalog Number: 28650
Launch Date: May 05,2005

Status: On orbit
Current Mode: U/V

Proposed frequencies:
-------------------
Indian transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacom : 145.940MHz continue carier signal

Dutch transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacon : 145.860MHz 12WPM with CW message
[07242005]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - OFF
FM REPEATER - DUAL V/U

Analog voice downlink: 435.300 MHz FM
435.150 mhz FM
Analog voice uplink: 145.880 mhz FM
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone
```

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

Current scheduled operating modes:
23 July
FM Repeater, V/S
Uplink: 145.920 mhz FM, 67hz PL Tone
Downlink 2401.200 mhz FM
[ANS-WSR thanks Mike, KE4AZN for the above information]
[07172005]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz (67.0 Hz PL tone) (See below for operating
procedures)
Downlink: 436.795 MHz

There have been unconfirmed reports on the amsat-bb remailer that SO-50 has
shifted downlink frequency as much as 5khz up. This both from Europe.

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The
order of operation is thus: (allow for Doppler as necessary)

1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm
the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT
the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window
will reset the 10 minute timer.
[09122004]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplink: 145.850 145.870 145.910 MHz FM

Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

John, N4QWL reports on July 16th, 2005:

Last evening I had a AOS to LOS qso with WI2W. FO-29 came up at 01:17z here in FM07 and I found WI2W and we chatted until 01:33z. The satellite was at 2 degrees elevation when I finally heard him start to crackle a bit. What a great QSO! To think that I watched this bird launch back in 1996 and it is still working so well is a real thrill. I believe I still have the video. I might just look for it and watch it again. Boy do I love this satellite stuff!
Look for you all up there.

Please send the reception reports to lab2 'at' jarl.or.jp.
Please use the subject line: 'FO-29 reception report'.

Mineo, JE9PEL, has an FO-29 satellite telemetry analysis program that will automatically analyze all digital telemetry from the satellite (such as current, voltage and temperature). FO29CWTE is available at:
http://www.ne.jp/asahi/hamradio/je9pel/
[ANS-WSR wishes to thanks John, N4QWL for this week's report]
[07172005]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

The latest information on AO-27 from control operator Michael Wyrick, N3UC (former N4USI), can be found at:
http://www.ao27.org

An AO-27 question-and-answer page is available on the AMSAT-NA web site, with updates by Ray, W2RS. The URL is:
http://www.amsat.org/amsat/intro/ao27faq.html

[ANS-WSR thanks John, K6YK, for this week's AO-27 report]
[08292004]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Semi-operational in sunlight.
Return to active status: June 21,2002

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B

Downlink: 29.400 to 29.500 MHz CW/USB Mode A
145.975 to 145.925 MHz CW/USB Mode B
Beacon: 29.502 MHz, 145.972 MHz, 435.1 MHz, 2304.1 MHz

Emily, W0EEC has created a website to allow the users of AO-7 to record
contacts, observations and use of the satellite more effectively at:
http://www.emilyshouse.com/experthams/ao7/main.php
This includes the ability to log contacts.

Tim, K3TZ has written a program to decode AO-07 telemetry.
The program can be downloaded at:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

For more AO-7 info:
http://www.amsat.org/amsat/sats/n7hpr/ao7.html
[11142004]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: U/V CROSS-BAND REPEATER
Digipeater: Inactive

The current Expedition 11 crew is:
Commander Sergei Krikalev
Flight Engineer John Phillips

Worldwide packet uplink: 145.990 MHz FM
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM
Doppler Shift is 10 KHz

Russian callsigns: RS0ISS, RZ3DZR
USA callsign: NA1SS
Packet station mailbox callsign: RS0ISS-11
Packet station keyboard callsign: RS0ISS-3
Digipeater callsign: ARISS

This off the ARISS webpage:
< http://www.rac.ca/ariss/oindex.htm#New%20ARISS%20Operations > :
The ARISS program is pleased to announce that the amateur radio equipment
aboard the International Space Station is now operating in cross-band repeat
mode. We realize that many of you will miss the packet-operating mode. How-
ever, cross-band repeat allows further experimentation of the ISS amateur
radio system

The downlink for this operating mode remains the same, so listen for the
stat-
ion on 145.80 MHz. The new uplink frequency is 437.80 MHz. All frequencies
are
subject to Doppler shifting. For further information on working satellites
and
adjusting for Doppler shift, please review Emily Clark's (W0EEC) excellent
presentation on AMSAT's website:
http://www.amsat.org/amsat-new/information/faqs/Intro_sats.pdf

The ISS daily crew schedule can be found at:
http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is
NOT
translated from Russian and posted.

More information is available at:
http://www.rac.ca/ariss
http://spaceflight.nasa.gov/station/reference/radio/
http://www.marexmg.org/fileshtml/unprotopage.html
http://www.issfanclub.com
http://oscar.dcarr.org/
[07242005]
NNNN
/EX

SB SAT @ AMSAT <W8ISS $ANS-205.S2
WSR 205 Part 2 07/24/2005

AMSAT NEWS SERVICE BULLETIN 205.S2 FROM AMSAT HQ
SILVER SPRING, MD, JULY 24, 2005
TO ALL RADIO AMATEURS
BID: $ANS-205.S2

AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - OFF
FM REPEATER - DUAL V/U

Analog voice downlink: 435.300 MHz FM
435.150 mhz FM
Analog voice uplink: 145.880 mhz FM
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

Current scheduled operating modes:
23 July
FM Repeater, V/S
Uplink: 145.920 mhz FM, 67hz PL Tone
Downlink 2401.200 mhz FM

[ANS-WSR thanks Mike, KE4AZN for the above information]
[07242005]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Non-Operational?????

Uplink/downlink: 145.827 MHz 1200 baud AX.25 AFSK via W3ADO-1
Aux/Uplink: 435.250 MHz 9600 baud via PCSAT-2 (off)
APRS Downlink: 144.390 MHz (Region 2)

PCSat is a 1200-baud APRS digipeater designed for use by stations using
hand-held or mobile transceivers. Downlinks feed a central web site at:
http://pcsat.aprs.org

The APRS-equipped PCSat was built by midshipmen from the U.S. Naval Academy
under the guidance of Bob Bruninga, WB4APR.
[07242005]
=====
CUTE-1
Catalog number: 27844
Launched: June 30,2003

Status: Operational

Uplink: ?
Downlink: 436.8375 CW
437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)
Cliff, K7RR reports:
In the latest Weekly Satellite Report, CUTE 1, #27844 is listed as
OPERATIONAL?
Indeed it is very operational as a CUBESAT sending CW telemetry on
436.8345 MHz. At the July 7 2005, 23:45:20 pass over the Western USA:
CUTE 1 6B A4 xx 7F D7 66A8 4702 FF FF7C 65
CUTE 1 6C A6 59 80 D9 66A8 4702 FF FE7C B6

The June 30th KEPS were within ten seconds of AOS and LOS. It is an very
good object to practice tracking as the orbit and transmitter power are
similar to proposed CUBESATS awaiting launch this December. As a check for
Doppler correction, the lack of change in tone is an excellent indicator.

CUTE 1 is a Japanese (Tokyo Institute of Technology) one kilogram
nanosatellite that was launched by a Rokot rocket from Plesetsk at

14:15 UT on 30 June 2003. It carries a 100 mW beacon at 436.8375 MHz.
Initial orbital parameters were period 101.4 min, apogee 831 km, perigee
819 km, and inclination 98.7?.

For further info about CUTE-1 goto:
http://lss.mes.titech.ac.jp/ssp/cubesat/operation/Schedule_e.html

[ANS WSR wishes to thank Cliff, K7RR, for this week's information]
[07242005]
=====
GO-32 TECHSAT-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
(435.325 n/a - temperature problems)
Uplinks: 145.850, 145.890, 145.930 FM
1269.700, 1269.800, 1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[03132005]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink: 145.850 or 145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz
Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[05152005]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for
APRS users.

Uplink: 145.90 145.92 145.94 145.96 MHz FM
(using 1200-baud Manchester FSK)
Downlink: 437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon: 2401.1428 MHz
Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

A WOD collection of current graphics along with general information
and telemetry samples can be found at:
http://www.telecable.es/personales/ea1bcu
[05092004]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational?

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK).
approx. 10 days ON, 10 days OFF
Mode-S Beacon: 2401.500 MHz. ... OFF
UHFBeacon: 435.025 MHz. ... OFF

This from Clive, G3CWV:

There is a small chance that OSCAR-11 may have started transmitting
again between 08 June to 10 June.

The frequency is 145.826.

Any reception reports would be appreciated. Please reply direct to
Clive G3CWV (g3cwv@amsat.org), or post reports to AMSAT-BB.

[ANS thanks Clive, G3CWV for the above information]

More information on UO-11 OSCAR-11 can be found at:
http://www.users.zetnet.co.uk/clivew/
[06122005]
NNNN
/EX

SB SAT @ AMSAT <W8ISS $ANS-205.S3
WSR 205 Part 3 07/24/2005

AMSAT NEWS SERVICE BULLETIN 205.S3 FROM AMSAT HQ
SILVER SPRING, MD, JULY 24, 2005
TO ALL RADIO AMATEURS
BID: $ANS-205.S3

THE FOLLOWING ARE IN ORBIT BUT ARE
NON-OPERATIONAL AT THIS TIME:

POSAT-1 PO-28
Catalog Number: 22829
Launched : September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 435.075 MHz
435.275 MHz

Uplink: 145.925 MHz
145.975 MHz

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

More information of POSAT-1 can be found at:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
http://www.amsat.org/amsat/sats/n7hpr/po28.html
[08152004]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon: 145.810 MHz (unmodulated carrier)

AO-10 has been locked into a Mode-B, 70-cm uplink and
2-meter downlink for several years.

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Non-operational

Uplink: 145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink: 435.812 MHz SSB
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Alberto E. Zagni - I2KBD reports on 02/13/05
The spacecraft is in MBL (safe mode) and is trasmitting just 6 channels
of telemetry. Temperatures and voltage are nominal, but there seems to
be a problem with the onboard receiver, refusing to accept commands.
The spacecraft was launched in 1993, thus nearing 12 years in orbit...

Best regards
Alberto E. Zagni - I2KBD
ITAMSAT Mission Director

More information of IO-26 can be found at:

http://joshua.micronet.it/english/itamsat/itamsathome.html
http://www.amsat.org/amsat/sats/n7hpr/io26.html
www.itamsat.org

[02132005]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon: 29.408 MHz
Robot: 29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB
Beacon: 145.860 MHz
Robot: 145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439

Launch Date: December 26, 1994

Status: Non-operational?

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB
Beacon: 29.352 MHz (intermittent)
SSB meeting frequency: 29.380 MHz (unofficial)

John, KD6PAG reports on June 16, 2004 to ANS:
RS-15 beacon seemed to be back in the mode where it's a tone about 5 seconds
off and then 5 seconds on this morning.

ANS is looking for more confirmations of RS-15 coming back.

[ANS thanks John, KD6PAG for RS-15 information]
[06202004]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplink: 145.84 145.86 145.88 145.90 MHz FM
(using 1200-baud Manchester FSK)
CW downlink: 437.125 MHz
Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)
Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM
Broadcast Callsign: HLO1-11
BBS: HLO1-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a
non-operational status.
[05092004]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM (9600-baud FSK)
Downlink: 436.500 MHz FM
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink frequency (listed on the PanSat web site) 436.500 MHz

The satellite is not available for general uplink transmissions.

The Naval Postgraduate School developed PanSat. At the time of
launch, PanSat spread-spectrum digital transponders were to
be available to Amateur Radio operators along with software to utilize
this technology.

The satellite is still operating, however, the spread spectrum packet
radio portion never took place. The spacecraft is now beyond it's
initial 2-year mission life, but telemetry records are still being
downloaded.

For more information, visit the official PanSat web site at:
http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS has no further information]
[05232004]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlink: 437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA
web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplink V-band 145.840 - 145.990 MHz CW/LSB
U-band 435.550 - 435.800 MHz CW/LSB
L1-band 1269.250 - 1269.500 MHz CW/LSB
L2-band 1268.325 - 1268.575 MHz CW/LSB
S1-band 2400.350 - 2400.600 MHz CW/LSB
Downlink: S2-band 2401.225 - 2401.475 MHz CW/USB
K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon: 2401.323, 24,048.035
[05232004]

SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational
Downlink: 437.075 MHz
Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz
Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
callsign KE6QMD, as per the user service agreement located at the following
URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Semi-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

AO-49 (SAFIR-M) is a German amateur radio payload onboard the small German scientific satellite "RUBIN-2".

AO-49 was built by the German amateur radio association "AATiS e.V." (German
acronym for "Arbeitskreis Amateurfunk und Telekommunikation in der Schule", which means: 'working group for amateur radio anand telecommunications in schools'). AO-49 is designed as a "store and broadcast" system for APRS based messages, dedicated for the use of schools in combination with the existing WX-Net and planned buoy experiments in Germany.

No transmissions detected since the 1st of February 2003! It appears AO-49 is not properly aligned to illuminate the solar panels. This should end soon. Due to its orbit, AO-49 will be in a phase without eclipses until 13Feb03.

Martin DG8UAU has written a small software program "SAFIR-M Decoder" to allow decoding of the received DATA0 frames. It is available at: http://amend.gmxhome.de in the section Aktuelles.

Details on AO-49 (SAFIR-M) can be found at:
http://amend.gmxhome.de

Information about AATiS e.V. is available at:
http://www.aatis.de
[05092004]
NNNN
/EX

SB SAT @ AMSAT <W8ISS $ANS-205.S4
WSR 205 Part 4 07/24/2005

AMSAT NEWS SERVICE BULLETIN 205.S4 FROM AMSAT HQ
SILVER SPRING, MD, JULY 24,2005
TO ALL RADIO AMATEURS
BID: $ANS-205.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE
PROPOSED FOR LAUNCH AT THIS TIME:

UCISAT ?O-??
Catalog number:
Proposed Launch Date: October 31, 2005

Status: Under Construction

Downlink: Submission in Progress
Uplink: Submission in Progress
Callsign: Submission in Progress

This from Matt Bennett, KF6RTB, UCISAT Communications Team Member:

Our website is www.ucisat.net .This is a new website, however, and doesn't have the "Status" section active yet. Because of the growing interest in our project, I'll push our webmaster to create updates (hopefully) on a week-to-week basis. For now, the current status of the mission is as follows:

-Expected Launch Date: October 31st, 2005
-Frequency Allocation: Submission in Progress
-Construction Status: Sub-Assembly
[WSR to thank Matt Bennett, KF6RTB, for this week's report.]
[01302005]
=====
SSETI ?O-??
Catalog Number:
Proposed Launch Date: LATE 2005

Status: AWAITING LAUNCH

Graham, G3VZV reports that the launch of SSETI has been put on hold till mid August of 2005.

SpaceDaily has a report about SSETI at:
http://www.spacedaily.com/news/internet-04zzzu.html

You can find more info about SSETI at:
http://sseti.gte.tuwien.ac.at/WSW4/

Looking at the website for the SSETI Express webcam
http://sseti.gte.tuwien.ac.at/WSW4/webcam.htm

[ANS thanks Graham, G3VZV for the above information]
[07242005]
=====
PCSAT2 ?0-??
Catalog Number:
Proposed Launch Date: May 2005

Status: Awaiting launch of STS-114

PCSAT2, which had previously been stowed in the Space Shuttle Discovery, arrived at Launch Complex 39B on 07 April 2005. PCSAT2 is now standing by ready to be launched on the first Space Shuttle return-to-flight mission.

PCSAT2 will use the same dual redundant AX.25 command and control system as used on PCsat (NO-44) offering 8 on/off commands, 5 telemetry channels and a serial port for the solar cell experiment telemetry. It also supports the Digital Comms Relay support of the PCsat/APRS mission. The packet uplink is on 145.825 MHz and the default downlinks are in the 435 MHz band to avoid any possible interference with existing ARISS missions. PCSAT2 will have quad redundant transmit inhibits for EVA safety issues, thus, it is also easy to turn off to avoid any issues with other UHF ARISS experiments that may be activated in the future. Also, the mission lifetime of PCSAT2 is only 1 year, because it is a sample-return mission, thus terminating any long term conflicts in

spectrum management.

The PCSAT2 mission is intended as an opportunity to augment existing
ARISS communications experiments with an external autonomous
communications payload. In this regard, it has several potential uses:

* A UI-Digipeater to help ease congestion on the currently shared
ARISS PMS (Packet Mail system)

* A PSK-31 transponder for multi-user communications to improve
accessibility for schools and ARISS outreach programs.

* An FM Voice repeater for full duplex crew communications to
facilitate crew-to-school ARISS contacts.

* Routine Telemetry on the spacecraft systems

For more information and pictures visit the PCSAT2 website at
http://www.ew.usna.edu/~bruninga/pcsat2.html

[ANS thanks Bob, WB4APR for the above information]
[07242005}
=====
PHASE 3E ?O-??
Catalog Number:
Proposed Launch Date: Early 2006

Status: Under Construction

William Leijenaar, PE1RAH reports on July 16th, 2005:

Hi AMSATs,

I always like to inform the AMSATs public about my P3e work, but
unfortunatly due to
some reasons there was not much time and nothing much to say...

However, now I am happy to announce that the my MODE-UV transponder design
for P3e is ready at the P3e integration place in Marburg (Germany). About 4
weeks ago I was in Marburg before, where the transponder has been checked.
Unfortunatly some unsure things were found in the design. The unsure things
were about long term stability after many years in space.

At home in The Netherlands, I changed the design with some minor changes to
have a secure long term stability. Finally I tested the transponder again
and it performed well within the specifications. Again something learned for
future transponder designs :o)

Last Wednesday I drove to AMSAT-DL P3e integrations place in Marburg again,
and have my transponder again checked. In the beginning it seemed that the
70cm receiver lost 10dB in sensetivity. After some more measurements we find
out that it was due to a bad attenuator we used for protection at the input.

Together with Karl Meinzer we looked for any problems, but so far we could
see (without HELAPS) all was okay. In the afternoon I went back home again,

this time without the MODE-UV.

Now the MODE-UV will get a new home, the home of P3e... :o)
I hope the transponder will work like its elder sister in AO-10, and you all
will enjoy it for many years...

It was lots of work to get it this far, but I know it is for a good
purpose...

For the latest project status update please visit the AMSAT-DL
P3-E web page:
http://www.amsat-dl.org/p3e/

[ANS-WSR wishes to thank William Leijenaar, PE1RAH for this week's report]
[07172005]
=====
CP1 ?o-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N6CP
Proposed Transmit Frequency: 436.845
[03272005]
=====
CP2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.325
[03272005]
=====
HAUSAT1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: D90HP
Proposed Transmit Frequency: 437.465
[03272005]
=====
ICE Cube 1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: W2CXM
Proposed Transmit Frequency: 437.305
[03272005]
=====
ICE Cube 2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N2VR
Proposed Transmit Frequency: 437.425
[03272005]
=====
ION ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.505
[03272005]
=====
KUTEsat ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: KC0RMW
Proposed Transmit Frequency: 437.385
[03272005]
=====
MEROPE ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: K7MSU-1
Proposed Transmit Frequency: 145.980
[03272005]
=====
nCUBE1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
2407.25
[03272005]
=====
RINCON ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
437.345
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]

=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SEEDS ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: JQ1YGU
Proposed Transmit Frequency: 437.485
[03272005]
=====
Mea Huaka ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.405
[03272005]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)

* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satelite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

Via the ans mailing list at AMSAT.ORG courtesy of AMSAT-NA.
To unsubscribe, send "unsubscribe ans" to Majordomo@amsat.org

314. Re: UHF vertical for amsats

Newsgroup: rec.radio.amateur.space
Date: 2005-07-26 09:45:10 UTC
From: philnyc <philnyc22@hotmail.com>
Message-ID: <1122371109.916621.90430@o13g2000cwo.googlegroups.com>
Source record: 2028

Rocketeer,

Thank you for the link. I'm seriously considering a constuction of Eggbeater2.

I'm not clear about one thing ==> On top, where the loops are crossing eachother, are they positioned directly one on top of the other ? or there is a small (known ?) amout of space ?

How about the reflectors, if there are crossing the boom , they must be spaced out . Do we know by how much ? b/c I'm sure that matters.

Thank you again.

Phil

315. Re: UHF vertical for amsats

Newsgroup: rec.radio.amateur.space
Date: 2005-07-26 16:16:55 UTC
From: rocketeer <rocketeer@hotmail.com>
Message-ID: <42E661F7.5040105@hotmail.com>
Source record: 2029

The loops "touch" each other at the top and bottom, think two cubes one inside the other at 90 degree separation looking from the top, like an old fashion "eggbeater". On the reflectors the measurement is documented how far below the loops they should be placed, also the reflectors "touch" each other at the mast, much like a "ground plane" on a vertical antenna, and have about 90 degree separation between reflector elements. I am sure the author of the site, K5OE would be glad to provide more information on the "eggbeaters".

M-2 makes these antennas, but run about $150.00 each the last I looked. The M-2 is shaped more like two spheres inside each other. One ham had the M-2 VHF and UHF on separate masts at field day, mounted on top of his motor home on each end of the roof, they worked really well.

Good luck,

rocketeer

philnyc wrote:

>Rocketeer,
>
>Thank you for the link. I'm seriously considering a constuction of
>Eggbeater2.
>
>I'm not clear about one thing ==> On top, where the loops are crossing
>eachother, are they positioned directly one on top of the other ? or
>there is a small (known ?) amout of space ?
>
>How about the reflectors, if there are crossing the boom , they must be
>spaced out . Do we know by how much ? b/c I'm sure that matters.
>
>Thank you again.
>
>Phil
>
>
>

316. Re: UHF vertical for amsats

Newsgroup: rec.radio.amateur.space
Date: 2005-07-27 19:21:56 UTC
From: philnyc <philnyc22@hotmail.com>
Message-ID: <1122492116.868206.106490@g43g2000cwa.googlegroups.com>
Source record: 2030

I'm researching all the materials I need to purchase for construcion of EB2.
According to the metric system that is used here in Europe (Poland) the standard electrical wires run as follows : 2.5 mm ; 3.5 ; 4 ++ (mm) , there for : 2.5 is the closest match to the Gauage # 10, this will be used to build (70 cm EB2), unfortunatly to build the EB 2 for 144 mhz , the closest match to Gauage # 12 which is equivalent to (3.264) is wire of dia. 3.5 mm .

I would like to ask if this is too much of a difference in diameter for the antenna work as intented ?

Thank you :)

Phil

317. Re: UHF vertical for amsats

Newsgroup: rec.radio.amateur.space
Date: 2005-07-27 19:44:36 UTC
From: philnyc <philnyc22@hotmail.com>
Message-ID: <1122493476.060354.279170@g47g2000cwa.googlegroups.com>
Source record: 2031

Correction to my previous post,

The closes match is Gauage 8 is 4mm not 3.5 mm. and 4 mm is closer to gauage # 6 . Even larger .

Phil

318. Re: UHF vertical for amsats

Newsgroup: rec.radio.amateur.space
Date: 2005-07-27 21:32:50 UTC
From: rocketeer <rocketeer@hotmail.com>
Message-ID: <42E7FD82.3040507@hotmail.com>
Source record: 2032

Using larger diameter wire, adjustment would be needed. How much
adjustment? Never looked into using any other diameter wire. So just as
ham radio is experimenting and half the fun, operating is the second
half of the fun.
Make the loops larger than the charts indicate and trim down for best SWR.

rocketeer

philnyc wrote:

>I'm researching all the materials I need to purchase for construcion of
>EB2.
>According to the metric system that is used here in Europe (Poland)
>the standard electrical wires run as follows : 2.5 mm ; 3.5 ; 4 ++
>(mm) , there for : 2.5 is the closest match to the Gauage # 10, this
>will be used to build (70 cm EB2), unfortunatly to build the EB 2 for
>144 mhz , the closest match to Gauage # 12 which is equivalent to (
>3.264) is wire of dia. 3.5 mm .
>
>I would like to ask if this is too much of a difference in diameter
>for the antenna work as intented ?
>
>Thank you :)
>
>Phil
>
>
>

319. Re: UHF vertical for amsats

Newsgroup: rec.radio.amateur.space
Date: 2005-07-28 01:28:25 UTC
From: Christopher Cox <chrisTOPHERcOX@coboxincORPOATED.comERCIAL>
Message-ID: <ZwWFe.34233$B52.13106@tornado.ohiordc.rr.com>
Source record: 2033

rocketeer wrote:
> The loops "touch" each other at the top and bottom,

With all due respect, I don't believe so.

The bottom of the loops where they are usually attached to a piece of RG-62 for phasing and matching. The tops usually cross each other with just enough gap so they are not electrically connected.

http://bordelon.net/freespace/radioflier-1/eggbeater.html
http://members.aol.com/k5oe/eggbeater.htm

TRA NAR ARRL EIEIO.....

320. Arrow antenna 'clone'

Newsgroup: rec.radio.amateur.space
Date: 2005-07-28 17:00:13 UTC
From: Brian Reay <see@website.invalid>
Message-ID: <xa8Ge.12987$bT4.2103@newsfe1-gui.ntli.net>
Source record: 2034

Anyone know of a design on the web, other than the one by WA5VJB?

--
Brian Reay
www.g8osn.org.uk
www.amateurradiotraining.org.uk
FP#898

321. FT817 for satellite

Newsgroup: rec.radio.amateur.space
Date: 2005-07-28 17:02:21 UTC
From: Brian Reay <see@website.invalid>
Message-ID: <xc8Ge.13000$bT4.7688@newsfe1-gui.ntli.net>
Source record: 2035

Has anyone used memory pairs, as per the FT817 manual (page 77) for satellite use?

If so, how did you find it?

--
Brian Reay
www.g8osn.org.uk
www.amateurradiotraining.org.uk
FP#898

322. Re: Arrow antenna 'clone'

Newsgroup: rec.radio.amateur.space
Date: 2005-07-29 01:21:39 UTC
From: Steve <va3sf@rogers.com>
Message-ID: <q8CdnYVtIps0GXTfRVn-3g@rogers.com>
Source record: 2036

Try this one. I built it and it works fine
http://www.ptsi.net/user/kc5jdg/yagi27.gif

Steve VA3SF
http://www.va3sf.com

"Brian Reay" <see@website.invalid> wrote in message
news:xa8Ge.12987$bT4.2103@newsfe1-gui.ntli.net...
> Anyone know of a design on the web, other than the one by WA5VJB?
>
> --
> Brian Reay
> www.g8osn.org.uk
> www.amateurradiotraining.org.uk
> FP#898
>
>

323. Re: Arrow antenna 'clone'

Newsgroup: rec.radio.amateur.space
Date: 2005-07-29 08:03:15 UTC
From: Brian Reay <see@website.invalid>
Message-ID: <7plGe.7619$Aw4.6246@newsfe5-win.ntli.net>
Source record: 2037

"Steve" <va3sf@rogers.com> wrote in message
news:q8CdnYVtIps0GXTfRVn-3g@rogers.com...
> Try this one. I built it and it works fine
> http://www.ptsi.net/user/kc5jdg/yagi27.gif
>
> Steve VA3SF
> http://www.va3sf.com
>

Thanks, exactly what I need by the looks of it.

73

--
Brian Reay
www.g8osn.org.uk
www.amateurradiotraining.org.uk
FP#898

324. 10 meter dish antenna on ebay

Newsgroup: rec.radio.amateur.space
Date: 2005-07-30 00:14:04 UTC
From: Hap Griffin <lgriffin@sc.rr.com>
Message-ID: <gDzGe.54565$oj4.1279415@twister.southeast.rr.com>
Source record: 2038

If you're interested in EME or radio-astronomy, there is a 10 meter C-band uplink dish available on ebay at http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&item=5794042849&ssPageName=ADME:B:EF:US:1 .

Hap Griffin
WZ4O

325. Re: UHF vertical for amsats

Newsgroup: rec.radio.amateur.space
Date: 2005-07-30 17:39:41 UTC
From: "George, KA3HSW" <not@vailable.to.spammers>
Message-ID: <xXOGe.376$ns.284@newsread1.news.atl.earthlink.net>
Source record: 2039

"rocketeer" <rocketeer@hotmail.com> wrote in message
news:42E661F7.5040105@hotmail.com...
> The loops "touch" each other at the top and bottom, think two cubes one
> inside the other at 90 degree separation looking from the top, like an old
> fashion "eggbeater". On the reflectors the measurement is

Absolutely not, unless you are using insulated wire!!! The loops must be
electrically isolated from one another at the top, and only connected at the
bottom by the phasing line, not "touching"!

> documented how far below the loops they should be placed, also the
> reflectors "touch" each other at the mast, much like a "ground plane" on a
> vertical antenna, and have about 90 degree separation between reflector
> elements. I am sure the author of the site, K5OE would be glad to provide
> more information on the "eggbeaters".
>

With the reflector elements, I don't think it matters whether they are
connected to each other or not.

326. DR-605T for satellite work?

Newsgroup: rec.radio.amateur.space
Date: 2005-08-01 21:45:54 UTC
From: RJ <rajohngm@worldnet.att.net>
Message-ID: <mKwHe.528073$cg1.155700@bgtnsc04-news.ops.worldnet.att.net>
Source record: 2040

Will an Alinco DR-605T provide the capabilities for working through
satellites by simultaneity receiving on VHF and transmitting on UHF?
Tnx, Bob AA8X

327. FCC proposal = CB'ers with ham licenses.

Newsgroup: rec.radio.amateur.space
Date: 2005-08-01 22:44:02 UTC
From: Roger Beep <breaker.breaker@channel.nineteen>
Message-ID: <42eea55f$0$91674$bb4e3ad8@newscene.com>
Source record: 2041
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

Ten-four?

Yah, that's a big ten-four.

All my channel 19 good-buddy CB friends are going to be so happy.

328. ANS-212 AMSAT News Service Weekly Bulletin

Newsgroup: rec.radio.amateur.space
Date: 2005-08-02 00:53:05 UTC
From: JoAnne Maenpaa <wb9jej_no-spam@earthlink.net>
Message-ID: <RtzHe.8928$6f.7569@newsread3.news.atl.earthlink.net>
Source record: 2042

AMSAT NEWS SERVICE
ANS-212

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

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* ARISS Status July 25, 2005
* PCSAT2 Launch
* PCSAT2 Downlink Challenge
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* VU2NUD Silent Key
* Echo Mode Change
* AMSAT President's Letter, July 2005
* SSETI Express Launch Delay
* AO-27 Mode Schedule Program Available
* AMSAT Symposium
* PCSAT2 On ISS

SB SAT @ AMSAT $ANS-212.01
ARISS Status July 25, 2005

AMSAT News Service Bulletin 212.01
From AMSAT HQ SILVER SPRING, MD.
July 31, 2005
To All RADIO AMATEURS
BID: $ANS-212.01

1. NES Teacher Workshop

A NASA Explorer School (NES) Satellite Communication Class was held at Goddard Space Flight Center July 18 - 22. The ARISS team introduced Amateur Radio and the ARISS program to thirty-five teachers.

A contact was scheduled with the ISS on Wednesday, July 20 at 17:31 UTC. Some of the educators positioned themselves at the NN1SS station located in Building 11 at GSFC, while others from the class were located outside Building 11, at a second station. The combined team participated by asking 15 questions of John Phillips, KE5DRY. The radio stations were set up to

enable both groups to hear all questions and answers. The teachers were very impressed and moved by the event. On July 22, the ARRL website posted the story, "Educators query ISS astronaut via ham radio." See: http://www.arrl.org/

2. SuitSat Status

The ARISS-Russia team successfully completed a vacuum test on the SuitSat hardware. Integration and testing continue as the team works on the hardware flight certification.

3. ARRL Article on Return to Flight Mission

On July 20, ARRL ran an article on the shuttle STS-114 Return to Flight mission. To view the story, "Shuttle Discovery launch at least a week away," see: http://www.arrl.org/

4. ARISS International Meeting, Guildford, U.K.

Preparations continue for the ARISS International Face-to-Face Meeting which will be held at the University of Surrey in Guildford, U.K. The AMSAT-UK Colloquium will be held Friday, July 29 through Sunday, July 31, and the ARISS meeting will continue on Monday and Tuesday, August 1 - 2. Information on both meetings may be found on the following website: http://www.uk.amsat.org/Colloquium/default.php

5. ARISS International Teleconference Held

The monthly ARISS International Teleconference was held on Tuesday, July 19. Among the agenda items discussed were plans for the upcoming ARISS International Face to Face Meeting, PCSAT2, and the SuitSat Project.

6. ARRL Article on ISS Ham Repeater Mode

On July 20, the ISS Ham radio system was set up to run in repeater mode. To view the July 21 ARRL article, "Amateur Radio on the International Space Station in repeater mode," see: http://www.arrl.org/

On Saturday, July 23, a station in Malaysia heard Sergei Krikalev, U5MIR, sign off from a general contact. He then heard the ISS packet beacon, ending the crossband repeater mode.

7. Astronaut Training

ESA French astronaut Leopold Eyharts spent some time last month with Kenneth Ransom, training and preparing for his Technician's license exam. He took and passed the exam this week, enabling him to participate in future ARISS contacts. Eyharts is scheduled as back up for the Expedition 12 crew.

[ANS thanks Carol Jackson, KB3LKI for the above information]

/EX

SB SAT @ AMSAT $ANS-212.02
PCSAT2 Launch

AMSAT News Service Bulletin 212.02
From AMSAT HQ SILVER SPRING, MD.
July 31, 2005
To All RADIO AMATEURS
BID: $ANS-212.02

PCSAT2 was carried into space on Tuesday, July 26 by STS-114. It will not be activated until it is installed on the outside of the ISS on 1 or 3 August during an EVA. After a week or so of on-orbit checkout, and if all goes well, the APRS digipeater will be activated for general use probably by 10 Aug.

But, well equipped ground stations are invited to help us capture early telemetry on the alternate downlink of 437.975 on the first few days of activation. Telemetry will be at 1200 and 9600 baud. For details, see: http://www.ew.usna.edu/~bruninga/pec/pc2ops.html

There are 2 classes of stations that can help.

1) We ask 1200 baud IGates or SATgates to monitor 437.975 and feed to the normal global APRS system. This will feed the live telemetry page. See: http://www.pcsat2.info/PCSat2Web/RealTime.jsp

2) 9600 Baud stations to monitor the same 437.975 for the special once-every-3.3 minutes 9600 baud data beacon (54 lines of data). Email your file to PC2@grc.nasa.gov

The UHF downlink is only 1 watt and so it will require a beam to hear it.

Good luck!

[ANS thanks Bob, WB4APR for the above information]

/EX

SB SAT @ AMSAT $ANS-212.03
PCSAT2 Downlink Challenge

AMSAT News Service Bulletin 212.03
From AMSAT HQ SILVER SPRING, MD.
July 31, 2005
To All RADIO AMATEURS
BID: $ANS-212.03

When PCSAT2 is enabled on Monday or Wednesday, (1,3 Aug) we'd like to capture as much of the 1200 baud and 9600 baud telemetry on 437.975 MHz as possible. See the plan on:
http://www.ew.usna.edu/~bruninga/pec/pc2ops.html

1200 baud telemetry is just an occasional packet every 10 or 60 seconds just like PCsat. 1200 baud stations can simply feed their downlinks directly into the global APRS system like normal. These will help update the LIVE PCSAT2 telemetry page by G4DPZ at:

http://www.pcsat2.info/PCSat2Web/RealTime.jsp

1200 baud capture files will not be requested to be emailed unless there is an anomoly and we need some missing data.

9600 baud stations will see the special solar cell experiment data which is used to measure cell degradation over time. We need the first data sets as a

benchmark for future comparisons. Having many ground stations capturing the data will help
assure a complete initial data set.

54 lines of 9600 baud data are transmitted as a beacon group once every 3 minutes 20 seconds consisting of 11 one-second data bursts of 5 lines spaced every 2 seconds. The 5th byte of each line is human readable as a serial number starting with "A" through "Z", then "a" through "z" and then "0", and "1".

The "challenge" is due to the high UHF Doppler and the burst nature. You have to anticipate the Doppler to get a complete set since there is nothing to tune in until it has begun.

Volunteers who want to take on this challenge:

1) Please be sure to set your TNC and PC clock to UTC within a second or so. Be sure time-stamping is ON. Use Hyperterm or ALOGGER or any other capture tool (ALOGGER format is preferred).

2) Use this file name convention with time stamp and your callsign to save the file, and also use the same format for the subject line of the Email.

PC2_YYMMDD_HHMM_CALL.txt

3) Email to PC2@grc.usna.gov

Soon we will have a separate SATGATE server just for collecting this data and a specialized version of ALOGGER which can not only log, but also serve as a simple IGate for feeding your serial port TNC into the SATGATE server.

ALOGGER is available from:
http://www.billdiaz.dynip.com/

TUNING DOPPLER: Remember that at AOS the UHF signal will be as much as 9 KHz high and at LOS will be as much as 9 KHz low. But at these times the doppler is *changing* the least and this is probably the best time to catch a complete file without any tuning glitches.

In the middle of the pass, the Doppler rate of change is the highest and although the signal will be strongest, over the center 2 minutes the doppler will shift as much as 8 KHz! This is why we expect to have to combine files from multiple users to get a complete set.

Computer tuning may not help, since the step-transition during a tuning step may garble a packet?

Also, all of our web pages will be down during this critical time since our entire building will be shut down for long planned electrical power work. Our command station will be operated via an emergency generator and a single long extension cord offering 15 amps. So read these web pages well prior to the event.

Good luck!

[ANS thanks Bob, WB4APR for the above information]

/EX

SB SAT @ AMSAT $ANS-212.04
AMSAT Video News Debuts

AMSAT News Service Bulletin 212.04
From AMSAT HQ SILVER SPRING, MD.
July 31, 2005
To All RADIO AMATEURS
BID: $ANS-212.04

The AMSAT web site has added a new feature intended to bring a close-up look at some of the activities of AMSAT. Members and non members alike will now have an opportunity to gain further insight into activities including "Space Day at the Smithsonian", AMSAT activities at Dayton, as well as features from the Annual Meeting and Symposium.

These video packages, delivered in Microsoft Media 9 format, are produced by long time AMSAT member Don Jacob. Don's background with the CBS television network in Los Angeles brings professional skill to this exciting new activity.

The first package available for viewing is on Space Day 2005. More packages have been shot and will be added to the NewsReel page shortly. To take a look, go to amsat.org and select the link on the left "AMSAT Video News".

Suggestions for additional material and general comments will be appreciated.

[ANS thanks Gunther, W8GSM for the above information]

/EX

SB SAT @ AMSAT $ANS-212.05
VU2NUD Silent Key

AMSAT News Service Bulletin 212.05
From AMSAT HQ SILVER SPRING, MD.
July 31, 2005
To All RADIO AMATEURS
BID: $ANS-212.05

AMSAT has received word that Mr. Nagesh, VU2NUD, is a silent key.

It was VU2NUD who encouraged William, PE1RAH, the designed of the Dutch transponder on Hamsat to get in touch with the project and

work with the Hamsat team.

AMSAT expresses condolences to the Nagesh family.

[ANS thanks William, PE1RAH, for the above information]

/EX

SB SAT @ AMSAT $ANS-212.06
Echo Mode Change

AMSAT News Service Bulletin 212.06
From AMSAT HQ SILVER SPRING, MD.
July 31, 2005
To All RADIO AMATEURS
BID: $ANS-212.06

Mike Kingery, KE4AZN, and the Echo Command Team changed the mode of the satellite on 28 July to the High Power FM repeater. This change is to support the Boy Scout National Jamboree, in progress, at Fort AP Hill in Virginia. This event occurs once every 4 years.

AMSAT would appreciate your help in supporting this event by allowing the K2BSA Jamboree station to use AO-51. If we treat this as we try to do on Kids Day, we can maximize the number of Scouts that are able to participate and use our satellite. Reports from the Jamboree indicate that the satellite station is drawing lots of interest from the Scouts.

Please listen for K2BSA anytime the satellite is over Virginia, and allow them to dominate the satellite when they are active.

[ANS thanks Mike, KE4AZN, and the Echo Command Team for the above information]

/EX

SB SAT @ AMSAT $ANS-212.07
AMSAT President's Letter, July 2005

AMSAT News Service Bulletin 212.07
From AMSAT HQ SILVER SPRING, MD.
July 31, 2005
To All RADIO AMATEURS
BID: $ANS-212.07

It has been quite a while since I have availed myself of the AMSAT e-mail channels to communicate with AMSAT members and
for that I apologize.

I have been focusing my communications on the Apogee View column and articles written for the AMSAT Journal and I have been encouraging AMSAT officers and Board members to communicate directly so as to distribute the work load and familiarize the membership with all of the members of their leadership team.

AMSAT has sent out ballots for the most contested election in recent memory. A great slate of candidates has been put forth
and only half of them will be elected to the Board so please cast your ballots thoughtfully. This year your vote is very
important.

The May/Jun issue of the AMSAT Journal was delayed because our publisher went out of business unexpectedly but we are back in production now. However we are in need of articles for the July/August issue as well as for the remainder of the year. If you have any story, construction project, activity or anecdote you would like to share contact our Journal editor Ed Long WA4SWJ (journal@amsat.org). Pictures are a great asset to any article, no matter how short, so take your camera to the next event! If you have something interesting but don't feel up to writing the article, that's OK. We are in the process of establishing a corps of "reporters" to write up these articles for you. Also, if you are a good writer and would like to volunteer as a reporter, contact Ed.

AMSAT-NA is hard at work on two projects, P3E and Eagle. Both of these projects are in direct support of AMSAT's strategic plan and vision statements, which call for emphasis on building High Earth Orbit Satellites. As you heard in a recent e-mail from Bob, N4HY there is significant progress on the P3E satellite's 3rd generation Internal Housekeeping Unit (IHU3), the computer brain for P3E and later Eagle.

There has also been progress on the new Software Defined Transponder (SDT) for modes U/V and L/S on Eagle. Lagging a bit, but still progressing, is the design of the C-C Rider C-band transponder for Eagle. Leadership for these projects is coming from Bob McGwier, N4HY and Frank Brickle, AB2KT with support from Tom Clark, W3IWI and Rick Hambly W2GPS. Design sessions are conducted in my lab once a week or so.

We need continuing financial support for these projects and I encourage everyone to donate what they can to AMSAT's general fund or specific projects in the AMSAT store at www.amsat.org or by calling the AMSAT office directly.

The AMSAT Echo satellite, now designated AO-51, is working almost flawlessly. It is the most capable and useful small satellite AMSAT has sponsored in many years. It takes a great deal of work from our software development and operations teams to keep Echo running this well and I thank them very much for their time and dedication.

I would like to reiterate what Robin VE3FRH, out Immediate Past President, said last year. "If you are a member of any AMSAT, please feel completely free to use ECHO, if you are not a member then please join and encourage all users to join. Unfortunately satellites do not 'Grow on Trees' they are not free to launch, but there are quite a few users who feel that it is their right to use what we have provided.

We really don't want to introduce a 'members only' policy to satellite use. For more details of ECHO and its capability call the AMSAT-NA office to order a copy of Gould Smith's ECHO book, also available through AMSAT-UK

(call Jim Heck).

AMSAT's support of Amateur Radio on human space flight missions excites the minds of many people through the ARISS program where we connect teachers and students directly to astronauts in space. I went to Goddard Space Flight Center to assist with an ARISS contact for a wide-eyed group of school teachers attending the NASA Explorer School satellite communication class. There were too many teachers to fit in the cramped confines of the ARISS command station so the group was split it two. Three of us took one group outside into a field to work the space station with an HT and an Arrow antenna. Using a separate HT to coordinate with AMSAT VP of Human Spaceflight, Frank Bauer, KA3HDO, in the control room the two groups of teachers got to ask their questions and get answers directly from the astronauts. The HT and Arrow worked perfectly - 100% "armchair copy." When I saw tears on the faces of the teachers and had a chance to pose for pictures and answer questions afterwards I was truly moved. That was very fine day.

I encourage you to contact your AMSAT leadership team directly with your questions and concerns. For best results, use the links and forms provided at:
http://www.amsat.org/amsat-new/AboutAmsat/officers.php.

Rick, W2GPS
AMSAT President

[ANS thanks Rick, W2GPS for the above information]

/EX

SB SAT @ AMSAT $ANS-212.08
SSETI Express Launch Delay

AMSAT News Service Bulletin 212.08
From AMSAT HQ SILVER SPRING, MD.
July 31, 2005
To All RADIO AMATEURS
BID: $ANS-212.08

The SSETI Express team been advised that the launch date for the COSMOS launch vehicle scheduled to carry the SSETI Express and a number of other satellites into space has been delayed for approximately one month. A revised launch date and time has not yet been confirmed.

Sorry but we will just have to keep our fingers crossed for a little longer!

[ANS thanks Graham, G3VZV for the above information]

/EX

SB SAT @ AMSAT $ANS-212.09
AO-27 Mode Schedule Program Available

AMSAT News Service Bulletin 212.09
From AMSAT HQ SILVER SPRING, MD.

July 31, 2005
To All RADIO AMATEURS
BID: $ANS-212.09

George, KA3HSW reports his son has finished the AO-27 mode schedule program. It is available for download if you would like to check it out. The program will show you AO-27's current mode, the UTC time of the next mode change, and the mode schedule for the next 24 hours, just as the ao27.org website does. It will also allow you to choose a future date from a calendar, and see the mode schedule for that date.

It is available in two versions: a Windows executable (EXE), or a JAR file which will run on ANY computer with the Java 2 runtime environment installed. The Windows EXE also requires that J2RE be installed: go to www.java.com. The JAR has been tested under Windows 2000 and XP, Suse and Red Hat Linux, and Mac OS9. Just put either file in a folder of your choice, and run it from there.

Please note that the first time you run it, you will get a "File not found" error as it looks for the epoch and schedule data files it needs. Just click "Update Data" under the File menu to retrieve the latest versions of these files from the ao27.org website, and it will run happily ever after.

You may download either version at:
http://home.earthlink.net/~ka3hsw/ao27
or follow the link on the www.ao27.org website to my son's download page.

[ANS thanks George, KA3HSW and his son for the above information]

/EX

SB SAT @ AMSAT $ANS-212.10
AMSAT Symposium

AMSAT News Service Bulletin 212.10
From AMSAT HQ SILVER SPRING, MD.
July 31, 2005
To All RADIO AMATEURS
BID: $ANS-212.10

Space! Ham radio goes there and you can join in the fun! Come to the AMSAT Technical Symposium and Annual Meeting this fall in lovely Lafayette, Louisiana. Education and technical sessions begin on Friday, the 7th of October. Technical, field ops, and the IARU forum follow through Sunday the 9th of October. Enjoy the best of Acadian Louisiana with Friday's "Shrimp Boil," Saturday's Banquet with great prizes, and Sunday's "Swamp Tour."

Register on line! For more, see:
http://www.amsat.org/amsat-new/symposium/.

[ANS thanks the AMSAT Symposium team for the above information]

/EX

SB SAT @ AMSAT $ANS-212.11
PCSAT2 On ISS

AMSAT News Service Bulletin 212.11
From AMSAT HQ SILVER SPRING, MD.
July 31, 2005
To All RADIO AMATEURS
BID: $ANS-212.11

Since PCSAT2 is on ISS but will also operate as an autonomous payload sometimes as well, it has interest on both the SAREX and AMSAT-BB mailing lists.

To avoid dual posting, however, we will generally make most postings on the AMSAT-BB that pertain to PCSAT2 operations and only make postings on SAREX when they involve PCSAT2 coordination with manned activities.

Our understanding is that during the deployment of PCSAT2 and initial checkout, that the ARISS system will probably remain in PACKET mode when not otherwise in use since this minimizes the potential for mutual interference.

Deployment is still expected 3 Aug or possibly earlier. After 2 weeks of checkout, user transponders may be activated. See http://www.ew.usna.edu/~bruninga/pec/pc2ops.html

[ANS thanks Bob, WB4APR for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Al Marote, WA1LBG
wa1lbg at amsat dot org

Via the ans mailing list at AMSAT.ORG courtesy of AMSAT-NA.
To unsubscribe, send "unsubscribe ans" to Majordomo@amsat.org

329. Re: FCC proposal = CB'ers with ham licenses.

Newsgroup: rec.radio.amateur.space
Date: 2005-08-02 03:17:21 UTC
From: "M.S." <notvalid@email.add>
Message-ID: <8BBHe.4$h4.875@sooner.brightok.net>
Source record: 2043
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

What a fool!

"Roger Beep" <breaker.breaker@channel.nineteen> wrote in message
news:42eea55f$0$91674$bb4e3ad8@newscene.com...
> Ten-four?
>
> Yah, that's a big ten-four.
>
> All my channel 19 good-buddy CB friends are going to be so happy.
>

330. Re: FCC proposal = CB'ers with ham licenses.

Newsgroup: rec.radio.amateur.space
Date: 2005-08-02 03:31:14 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <eOBHe.151$sZ7.2633801@news.sisna.com>
Source record: 2044
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

Roger Beep:

How is your partner doing Echo Mike? And, old Leen E. Ere?

Roger, you and your buddies ready to get up to speed, grab the BIG tickets and QSO with Art Bell on 3.840? He comes on around 10:30 PST, are your buddies anxious?

As popular as Art is with the ladies, I imagine the only reason the girls are grabbing their tickets is to chat with him...

Tell him to say hi to Wayne for me when ya chat him up...

John
"Roger Beep" <breaker.breaker@channel.nineteen> wrote in message
news:42eea55f$0$91674$bb4e3ad8@newscene.com...
> Ten-four?
>
> Yah, that's a big ten-four.
>
> All my channel 19 good-buddy CB friends are going to be so happy.
>

331. Tonna F9FT Satellite Yagi Antenna 20899

Newsgroup: rec.radio.amateur.space
Date: 2005-08-02 11:27:01 UTC
From: Neven Mrduljas <Neven.Mrduljas@fina.hr>
Message-ID: <1122982120.440001@internet.fina.hr>
Source record: 2045

Does anybody have experience with this antenna in satellite operation?
If yes, can this antenna be used for local operation on 2m because angle
between planes of 2m and 70 cm antennas and ground surface is cca 45
degrees? Does anybody know the reason this antenna is tilted for cca 45
degrees? All experiences with this antenna are welcome!

73 de Neven, 9A5YY

332. WSR-212 AMSAT Weekly Satellite Report

Newsgroup: rec.radio.amateur.space
Date: 2005-08-02 12:32:32 UTC
From: JoAnne Maenpaa <wb9jej_no-spam@earthlink.net>
Message-ID: <AJJHe.12690$oZ.2682@newsread2.news.atl.earthlink.net>
Source record: 2046

```
This report is organized into 4 parts.
Part 1 - operational analog amateur satellites.
Part 2 - operational digital amateur satellites.
Part 3 - non - operational satellites
Part 4 - proposed satellites

SB SAT @ AMSAT <W8ISS $ANS-212.S1
WSR 212 Part 1 07/31/2005

AMSAT NEWS SERVICE BULLETIN 212.S1 FROM AMSAT HQ
SILVER SPRING, MD, JULY 31, 2005
TO ALL RADIO AMATEURS
BID: $ANS-212.S1

VO-52 HAMSAT
Catalog Number: 28650
Launch Date: May 05,2005

Status: On orbit
Current Mode: U/V

Proposed frequencies:
-------------------
Indian transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacom : 145.940MHz continue carier signal

Dutch transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacon : 145.860MHz 12WPM with CW message
[07242005]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - OFF
FM REPEATER - V/U HIGH POWER

Analog voice downlink: 435.300 MHz FM
435.150 mhz FM
Analog voice uplink: 145.880 mhz FM
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone
```

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

Current scheduled operating modes:
1 Aug
FM Repeater, V/U, High Power
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM

15 Aug
FM Repeater, V/S
Uplink: 145.920 mhz FM, 67hz PL Tone
Downlink 2401.200 mhz FM

22 Aug
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital

[ANS-WSR thanks Mike, KE4AZN for the above information]
[07312005]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz (67.0 Hz PL tone) (See below for operating
procedures)
Downlink: 436.795 MHz

There have been unconfirmed reports on the amsat-bb remailer that SO-50 has
shifted downlink frequency as much as 5khz up. This both from Europe.

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The
order of operation is thus: (allow for Doppler as necessary)

1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm
the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT
the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window
will reset the 10 minute timer.
[09122004]

=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplink: 145.850 145.870 145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

John, N4QWL reports on July 16th, 2005:

Last evening I had a AOS to LOS qso with WI2W. FO-29 came up at 01:17z here in FM07 and I found WI2W and we chatted until 01:33z. The satellite was at 2 degrees elevation when I finally heard him start to crackle a bit. What a great QSO! To think that I watched this bird launch back in 1996 and it is still working so well is a real thrill. I believe I still have the video. I might just look for it and watch it again. Boy do I love this satellite stuff!
Look for you all up there.

Please send the reception reports to lab2 'at' jarl.or.jp.
Please use the subject line: 'FO-29 reception report'.

Mineo, JE9PEL, has an FO-29 satellite telemetry analysis program that will automatically analyze all digital telemetry from the satellite (such as current, voltage and temperature). FO29CWTE is available at:
http://www.ne.jp/asahi/hamradio/je9pel/
[ANS-WSR wishes to thanks John, N4QWL for this week's report]
[07172005]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

The latest information on AO-27 from control operator Michael Wyrick, N3UC (former N4USI), can be found at:
http://www.ao27.org

An AO-27 question-and-answer page is available on the AMSAT-NA web site, with updates by Ray, W2RS. The URL is:

http://www.amsat.org/amsat/intro/ao27faq.html

[ANS-WSR thanks John, K6YK, for this week's AO-27 report]
[08292004]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Semi-operational in sunlight.
Return to active status: June 21,2002

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A
145.975 to 145.925 MHz CW/USB Mode B
Beacon: 29.502 MHz, 145.972 MHz, 435.1 MHz, 2304.1 MHz

Emily, W0EEC has created a website to allow the users of AO-7 to record
contacts, observations and use of the satellite more effectively at:
http://www.emilyshouse.com/experthams/ao7/main.php
This includes the ability to log contacts.

Tim, K3TZ has written a program to decode AO-07 telemetry.
The program can be downloaded at:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

For more AO-7 info:
http://www.amsat.org/amsat/sats/n7hpr/ao7.html
[11142004]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: U/V CROSS-BAND REPEATER
Digipeater: Inactive

The current Expedition 11 crew is:
Commander Sergei Krikalev
Flight Engineer John Phillips

Worldwide packet uplink: 145.990 MHz FM
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM
Doppler Shift is 10 KHz

Russian callsigns: RS0ISS, RZ3DZR
USA callsign: NA1SS

Packet station mailbox callsign: RS0ISS-11
Packet station keyboard callsign: RS0ISS-3
Digipeater callsign: ARISS

This off the ARISS webpage:
< http://www.rac.ca/ariss/oindex.htm#New%20ARISS%20Operations > :
The ARISS program is pleased to announce that the amateur radio equipment
aboard the International Space Station is now operating in cross-band repeat
mode. We realize that many of you will miss the packet-operating mode. How-
ever, cross-band repeat allows further experimentation of the ISS amateur
radio system

The downlink for this operating mode remains the same, so listen for the
stat-
ion on 145.80 MHz. The new uplink frequency is 437.80 MHz. All frequencies
are
subject to Doppler shifting. For further information on working satellites
and
adjusting for Doppler shift, please review Emily Clark's (W0EEC) excellent
presentation on AMSAT's website:
http://www.amsat.org/amsat-new/information/faqs/Intro_sats.pdf

The ISS daily crew schedule can be found at:
http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is
NOT
translated from Russian and posted.

More information is available at:
http://www.rac.ca/ariss
http://spaceflight.nasa.gov/station/reference/radio/
http://www.marexmg.org/fileshtml/unprotopage.html
http://www.issfanclub.com
http://oscar.dcarr.org/
[07242005]
NNNN
/EX

SB SAT @ AMSAT <W8ISS $ANS-212.S2
WSR 212 Part 2 07/31/2005

AMSAT NEWS SERVICE BULLETIN 212.S2 FROM AMSAT HQ
SILVER SPRING, MD, JULY 31, 2005
TO ALL RADIO AMATEURS
BID: $ANS-212.S2

AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - OFF
FM REPEATER - V/U HIGH POWER

Analog voice downlink: 435.300 MHz FM
435.150 mhz FM
Analog voice uplink: 145.880 mhz FM
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

Current scheduled operating modes:
1 Aug
FM Repeater, V/U, High Power
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM

15 Aug
FM Repeater, V/S
Uplink: 145.920 mhz FM, 67hz PL Tone
Downlink 2401.200 mhz FM

22 Aug
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital

[ANS-WSR thanks Mike, KE4AZN for the above information]
[07312005]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Non-Operational?????

Uplink/downlink: 145.827 MHz 1200 baud AX.25 AFSK via W3ADO-1
Aux/Uplink: 435.250 MHz 9600 baud via PCSAT-2 (off)
APRS Downlink: 144.390 MHz (Region 2)

PCSat is a 1200-baud APRS digipeater designed for use by stations using
hand-held or mobile transceivers. Downlinks feed a central web site at:
http://pcsat.aprs.org

The APRS-equipped PCSat was built by midshipmen from the U.S. Naval Academy
under the guidance of Bob Bruninga, WB4APR.
[07242005]
=====

CUTE-1
Catalog number: 27844
Launched: June 30,2003

Status: Operational

Uplink: ?
Downlink: 436.8375 CW
437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)
Cliff, K7RR reports:
In the latest Weekly Satellite Report, CUTE 1, #27844 is listed as
OPERATIONAL?
Indeed it is very operational as a CUBESAT sending CW telemetry on
436.8345 MHz. At the July 7 2005, 23:45:20 pass over the Western USA:
CUTE 1 6B A4 xx 7F D7 66A8 4702 FF FF7C 65
CUTE 1 6C A6 59 80 D9 66A8 4702 FF FE7C B6

The June 30th KEPS were within ten seconds of AOS and LOS. It is an very
good object to practice tracking as the orbit and transmitter power are
similar to proposed CUBESATS awaiting launch this December. As a check for
Doppler correction, the lack of change in tone is an excellent indicator.

CUTE 1 is a Japanese (Tokyo Institute of Technology) one kilogram
nanosatellite that was launched by a Rokot rocket from Plesetsk at
14:15 UT on 30 June 2003. It carries a 100 mW beacon at 436.8375 MHz.
Initial orbital parameters were period 101.4 min, apogee 831 km, perigee
819 km, and inclination 98.7?.

For further info about CUTE-1 goto:
http://lss.mes.titech.ac.jp/ssp/cubesat/operation/Schedule_e.html

[ANS WSR wishes to thank Cliff, K7RR, for this week's information]
[07242005]
=====
GO-32 TECHSAT-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
(435.325 n/a - temperature problems)
Uplinks: 145.850, 145.890, 145.930 FM
1269.700, 1269.800, 1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[03132005]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548

Launched: September 26, 2000

Status: Operational

Uplink: 145.850 or 145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz
Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[05152005]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for
APRS users.

Uplink: 145.90 145.92 145.94 145.96 MHz FM
(using 1200-baud Manchester FSK)
Downlink: 437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon: 2401.1428 MHz
Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

A WOD collection of current graphics along with general information
and telemetry samples can be found at:
http://www.telecable.es/personales/ea1bcu
[05092004]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational?

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK).
approx. 10 days ON, 10 days OFF
Mode-S Beacon: 2401.500 MHz. ... OFF
UHFBeacon: 435.025 MHz. ... OFF

This from Mark, Ku7z:
I heard and recorded UO-11 on its last pass over my QTH here at DN41af at
approx 0145 utc July 30, 2005.

Please Listen up for it on 145.826.

And let Clive G3CWV know at g3cwv@amsat.org

Any reception reports would be appreciated. Please reply direct to
Clive G3CWV (g3cwv@amsat.org), or post reports to AMSAT-BB.

More information on UO-11 OSCAR-11 can be found at:
http://www.users.zetnet.co.uk/clivew/

MPEG3 files can be found here at Mineo, JE9PEL website:
http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm

[ANS thanks Mark, Ku7z and Mineo, JE9PEL for the above information]
[07312005]
NNNN
/EX

SB SAT @ AMSAT <W8ISS $ANS-212.S3
WSR 212 Part 3 07/31/2005

AMSAT NEWS SERVICE BULLETIN 212.S3 FROM AMSAT HQ
SILVER SPRING, MD, JULY 31, 2005
TO ALL RADIO AMATEURS
BID: $ANS-212.S3

THE FOLLOWING ARE IN ORBIT BUT ARE
NON-OPERATIONAL AT THIS TIME:

POSAT-1 PO-28
Catalog Number: 22829
Launched : September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 435.075 MHz
435.275 MHz

Uplink: 145.925 MHz
145.975 MHz

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

Amateurs Get "New"FM Satellite

It was announced at the AMSAT-UK International Space Colloquium in
Guildford, England by the AMSAT-UK secretary Jim Heck G3WGM that Amateurs
will be get-
ting a new FM satellite to use.

PO-28 (POSAT-1) was launched on September 25th 1993. It's primary purpose
was
for commercial use on frequencies outside the Amateur bands but it also had
the capability to operate on the Amateur bands. After prolonged negotiations
it has been agreed that the satellite can be switched permanently to the
Ama-
teur frequencies.

It is expected that the process to change over the operation of the
satellite
from Commercial to Amateur use will take a couple of weeks.

PO-28 (POSAT-1) was built at the University of Surrey within a collaborative
programme in satellite technology between a consortium of Portuguese
academia
and Industry (LNETI, EFACEC, OGMA, MARCONI, ALCATEL, IST, UBI & CEDINTEC)
and
the Univerity of Surrey, managed through Surrey Satellite Technology Ltd.

Uplink Frequencies: 145.925 and 145.975 MHz
Downlink Frequencies: 435.075 and 435.275 MHz

More information of POSAT-1 can be found at:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
http://www.amsat.org/amsat/sats/n7hpr/po28.html
[ANS-WSR wishes to thanks Trevor, M5AKA for this week's information.]
[07312005]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon: 145.810 MHz (unmodulated carrier)

AO-10 has been locked into a Mode-B, 70-cm uplink and
2-meter downlink for several years.

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Non-operational

Uplink: 145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink: 435.812 MHz SSB
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Alberto E. Zagni - I2KBD reports on 02/13/05
The spacecraft is in MBL (safe mode) and is trasmitting just 6 channels
of telemetry. Temperatures and voltage are nominal, but there seems to
be a problem with the onboard receiver, refusing to accept commands.
The spacecraft was launched in 1993, thus nearing 12 years in orbit...

Best regards
Alberto E. Zagni - I2KBD
ITAMSAT Mission Director

More information of IO-26 can be found at:

http://joshua.micronet.it/english/itamsat/itamsathome.html
http://www.amsat.org/amsat/sats/n7hpr/io26.html
www.itamsat.org

[02132005]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon: 29.408 MHz
Robot: 29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB
Beacon: 145.860 MHz
Robot: 145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM
Broadcast Callsign: UOSAT5-11

BBS: UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB
Beacon: 29.352 MHz (intermittent)
SSB meeting frequency: 29.380 MHz (unofficial)

John, KD6PAG reports on June 16, 2004 to ANS:
RS-15 beacon seemed to be back in the mode where it's a tone about 5 seconds
off and then 5 seconds on this morning.

ANS is looking for more confirmations of RS-15 coming back.

[ANS thanks John, KD6PAG for RS-15 information]
[06202004]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplink: 145.84 145.86 145.88 145.90 MHz FM
(using 1200-baud Manchester FSK)
CW downlink: 437.125 MHz
Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)
Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]
=====

KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM
Broadcast Callsign: HLO1-11
BBS: HLO1-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a
non-operational status.
[05092004]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM (9600-baud FSK)
Downlink: 436.500 MHz FM
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink frequency (listed on the PanSat web site) 436.500 MHz

The satellite is not available for general uplink transmissions.

The Naval Postgraduate School developed PanSat. At the time of
launch, PanSat spread-spectrum digital transponders were to
be available to Amateur Radio operators along with software to utilize
this technology.

The satellite is still operating, however, the spread spectrum packet
radio portion never took place. The spacecraft is now beyond it's
initial 2-year mission life, but telemetry records are still being
downloaded.

For more information, visit the official PanSat web site at:
http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS has no further information]
[05232004]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlink: 437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA
web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplink V-band 145.840 - 145.990 MHz CW/LSB
U-band 435.550 - 435.800 MHz CW/LSB
L1-band 1269.250 - 1269.500 MHz CW/LSB
L2-band 1268.325 - 1268.575 MHz CW/LSB

S1-band 2400.350 - 2400.600 MHz CW/LSB
Downlink: S2-band 2401.225 - 2401.475 MHz CW/USB
K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon: 2401.323, 24,048.035
[05232004]

SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational
Downlink: 437.075 MHz
Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz
Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
callsign KE6QMD, as per the user service agreement located at the following
URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Semi-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

AO-49 (SAFIR-M) is a German amateur radio payload onboard the small German scientific satellite "RUBIN-2".

AO-49 was built by the German amateur radio association "AATiS e.V." (German
acronym for "Arbeitskreis Amateurfunk und Telekommunikation in der Schule", which means: 'working group for amateur radio anand telecommunications in schools'). AO-49 is designed as a "store and broadcast" system for APRS based messages, dedicated for the use of schools in combination with the existing WX-Net and planned buoy experiments in Germany.

No transmissions detected since the 1st of February 2003! It appears AO-49 is not properly aligned to illuminate the solar panels. This should end soon. Due to its orbit, AO-49 will be in a phase without eclipses until 13Feb03.

Martin DG8UAU has written a small software program "SAFIR-M Decoder" to allow decoding of the received DATA0 frames. It is available at: http://amend.gmxhome.de in the section Aktuelles.

Details on AO-49 (SAFIR-M) can be found at:
http://amend.gmxhome.de

Information about AATiS e.V. is available at:
http://www.aatis.de
[05092004]
NNNN
/EX

SB SAT @ AMSAT <W8ISS $ANS-212.S4
WSR 212 Part 4 07/31/2005

AMSAT NEWS SERVICE BULLETIN 212.S4 FROM AMSAT HQ
SILVER SPRING, MD, JULY 31,2005
TO ALL RADIO AMATEURS
BID: $ANS-212.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE
PROPOSED FOR LAUNCH AT THIS TIME:

UCISAT ?O-??
Catalog number:
Proposed Launch Date: October 31, 2005

Status: Under Construction

Downlink: Submission in Progress
Uplink: Submission in Progress

Callsign: Submission in Progress

This from Matt Bennett, KF6RTB, UCISAT Communications Team Member:

Our website is www.ucisat.net .This is a new website, however, and doesn't have the "Status" section active yet. Because of the growing interest in our project, I'll push our webmaster to create updates (hopefully) on a week-to-week basis. For now, the current status of the mission is as follows:

-Expected Launch Date: October 31st, 2005
-Frequency Allocation: Submission in Progress
-Construction Status: Sub-Assembly
[WSR to thank Matt Bennett, KF6RTB, for this week's report.]
[01302005]
=====
SSETI ?O-??
Catalog Number:
Proposed Launch Date: LATE 2005

Status: AWAITING LAUNCH

Graham, G3VZV reports:
We have now been advised that the revised launch date for SSETI Express and the other satellites on the DMC3 COSMOS launch has been confirmed as September
27th - so please keep those fingers crossed!

SpaceDaily has a report about SSETI at:
http://www.spacedaily.com/news/internet-04zzzu.html

You can find more info about SSETI at:
http://sseti.gte.tuwien.ac.at/WSW4/

Looking at the website for the SSETI Express webcam
http://sseti.gte.tuwien.ac.at/WSW4/webcam.htm

[ANS thanks Graham, G3VZV for the above information]
[07312005]
=====
PCSAT2 ?0-??
Catalog Number:
Proposed Launch Date: August 1, 2005

Status: Onboard International Space Station

Bob, WB4APR reports:
Since PCSAT2 is on ISS but will also operate as an autonomous payload sometimes as well, it has interest on both the SAREX and AMSAT-BB mailing lists.

To avoid dual posting, however, we will generally make most postings on the AMSAT-BB that pertain to PCSAT2 operations and only make postings on SAREX when they involve PCSAT2 coordination with manned activities.

Our understanding is that during the deployment of PCSAT2 and initial check-
out, that the ARISS system will probably remain in PACKET mode when not
other-
wise in use since this minimizes the potential for mutual interference.

Deployment is still expected 3 Aug or possibly earlier. After 2 weeks of
checkout, user transponders may be activated. See:
http://www.ew.usna.edu/~bruninga/pec/pc2ops.html

The PCSAT2 mission is intended as an opportunity to augment existing
ARISS communications experiments with an external autonomous
communications payload. In this regard, it has several potential uses:

* A UI-Digipeater to help ease congestion on the currently shared
ARISS PMS (Packet Mail system)

* A PSK-31 transponder for multi-user communications to improve
accessibility for schools and ARISS outreach programs.

* An FM Voice repeater for full duplex crew communications to
facilitate crew-to-school ARISS contacts.

* Routine Telemetry on the spacecraft systems

For more information and pictures visit the PCSAT2 website at
http://www.ew.usna.edu/~bruninga/pcsat2.html

[ANS thanks Bob, WB4APR for the above information]
[07312005}
=====
PHASE 3E ?O-??
Catalog Number:
Proposed Launch Date: Early 2006

Status: Under Construction

William Leijenaar, PE1RAH reports on July 16th, 2005:

Hi AMSATs,

I always like to inform the AMSATs public about my P3e work, but
unfortunatly due to
some reasons there was not much time and nothing much to say...

However, now I am happy to announce that the my MODE-UV transponder design
for P3e is ready at the P3e integration place in Marburg (Germany). About 4
weeks ago I was in Marburg before, where the transponder has been checked.
Unfortunatly some unsure things were found in the design. The unsure things
were about long term stability after many years in space.

At home in The Netherlands, I changed the design with some minor changes to
have a secure long term stability. Finally I tested the transponder again
and it performed well within the specifications. Again something learned for
future transponder designs :o)

Last Wednesday I drove to AMSAT-DL P3e integrations place in Marburg again, and have my transponder again checked. In the beginning it seemed that the 70cm receiver lost 10dB in sensetivity. After some more measurements we find out that it was due to a bad attenuator we used for protection at the input.

Together with Karl Meinzer we looked for any problems, but so far we could see (without HELAPS) all was okay. In the afternoon I went back home again, this time without the MODE-UV.

Now the MODE-UV will get a new home, the home of P3e... :o)
I hope the transponder will work like its elder sister in AO-10, and you all will enjoy it for many years...

It was lots of work to get it this far, but I know it is for a good purpose...

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/

[ANS-WSR wishes to thank William Leijenaar, PE1RAH for this week's report]
[07172005]
=====
CP1 ?o-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N6CP
Proposed Transmit Frequency: 436.845
[03272005]
=====
CP2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.325
[03272005]
=====
HAUSAT1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: D90HP
Proposed Transmit Frequency: 437.465
[03272005]
=====
ICE Cube 1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: W2CXM
Proposed Transmit Frequency: 437.305
[03272005]

=====
ICE Cube 2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N2VR
Proposed Transmit Frequency: 437.425
[03272005]
=====
ION ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.505
[03272005]
=====
KUTEsat ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: KC0RMW
Proposed Transmit Frequency: 437.385
[03272005]
=====
MEROPE ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: K7MSU-1
Proposed Transmit Frequency: 145.980
[03272005]
=====
nCUBE1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
2407.25
[03272005]
=====
RINCON ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
437.345
[03272005]
=====
SACRED ?O-??

Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SEEDS ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: JQ1YGU
Proposed Transmit Frequency: 437.485
[03272005]
=====
Mea Huaka ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.405
[03272005]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satelite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

333. someone help me build a QFH ?

Newsgroup: rec.radio.amateur.space
Date: 2005-08-03 09:23:49 UTC
From: Andrew Rich <vk4tec@hotmail.com>
Message-ID: <dcq20bnhr1@nnrp.waia.asn.au>
Source record: 2047

[No readable article body recovered]

334. Re: FCC proposal = CB'ers with ham licenses.

Newsgroup: rec.radio.amateur.space
Date: 2005-08-05 01:16:21 UTC
From: Fred Garvin <garv@elaborate.net>
Message-ID: <2005080421260637709%garv@elaboratenet>
Source record: 2048
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

On 2005-08-01 18:44:02 -0400, Roger Beep
<breaker.breaker@channel.nineteen> said:

> Ten-four?
>
> Yah, that's a big ten-four.
>
> All my channel 19 good-buddy CB friends are going to be so happy.

Get a life you asshat

--
PCs, like air-conditioners, are useless when you open Windows.

335. Re: FCC proposal = CB'ers with ham licenses.

Newsgroup: rec.radio.amateur.space
Date: 2005-08-05 12:23:24 UTC
From: bigamps <bigamps@even.louder.net>
Message-ID: <0TIIe.3690$j21.1123@news01.roc.ny>
Source record: 2049
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

Roger Beep wrote:
> Ten-four?
>
> Yah, that's a big ten-four.
>
> All my channel 19 good-buddy CB friends are going to be so happy.

In all likelihood it'll improve things on the bands when the whiny old timers finally give up and go away.

336. New satellite PCSAT2

Newsgroup: rec.radio.amateur.space
Date: 2005-08-06 16:00:24 UTC
From: rocketeer <rocketeer@hotmail.com>
Message-ID: <p_idnfl09688Q2nfRVn-tQ@comcast.com>
Source record: 1900

The space shuttle crew placed PCSAT2 on one of the solar truss arms of International Space Station.
It is undergoing tests, you can listen at 435.975 for 9600bps Packet Telemetry. Also two tests on PSK31
are going to be done on passes over the USA at about 1540 UTC and 1715 UTC August 6, 2005.
Downlink for PSK31 is 435.275 FM +- Doppler (start at 435.278 and down in 5 kHz steps as the pass
goes over your QTH. Messages about testing and other information is posted on AMSAT-BB
by Bob Bruninga WB4APR on that mailing list about PCSAT2. Also information at:
http://www.ew.usna.edu/~bruninga/pcsat2.html

337. Re: FCC proposal = CB'ers with ham licenses.

Newsgroup: rec.radio.amateur.space
Date: 2005-08-06 23:07:46 UTC
From: Bandit <Bandit_barefoot@banditradio.com>
Message-ID: <42F542C0.C54AF36A@banditradio.com>
Source record: 1901
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

We all don't need no stinking fcc ticket to use our linears.

Nothin will change, morse rules.

Fred wrote:

> On 2005-08-01 18:44:02 -0400, Roger Beep
> <breaker.breaker@channel.nineteen> said:
>
> > Ten-four?
> >
> > Yah, that's a big ten-four.
> >
> > All my channel 19 good-buddy CB friends are going to be so happy.
>
> Get a life you asshat
>
> --
> PCs, like air-conditioners, are useless when you open Windows.

338. Re: FCC proposal = CB'ers with ham licenses.

Newsgroup: rec.radio.amateur.space
Date: 2005-08-07 00:26:08 UTC
From: Mr Fed UP <mrfedup@bellsouth.net>
Message-ID: <qxcJe.19098$jq.15300@bignews3.bellsouth.net>
Source record: 1902
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

Wooooo Hooooo I likes a good thread....
opinions a lot like azzzholes everyone's got one. wheeeeee

10 4 over rojor dojor we gots us a konvoy

"Bandit" <Bandit_barefoot@banditradio.com> wrote in message
news:42F542C0.C54AF36A@banditradio.com...
> We all don't need no stinking fcc ticket to use our linears.
>
> Nothin will change, morse rules.
>
> Fred wrote:
>
>> On 2005-08-01 18:44:02 -0400, Roger Beep
>> <breaker.breaker@channel.nineteen> said:
>>
>> > Ten-four?
>> >
>> > Yah, that's a big ten-four.
>> >
>> > All my channel 19 good-buddy CB friends are going to be so happy.
>>
>> Get a life you asshat
>>
>> --
>> PCs, like air-conditioners, are useless when you open Windows.
>

339. Re: DR-605T for satellite work?

Newsgroup: rec.radio.amateur.space
Date: 2005-08-07 00:38:28 UTC
From: "Mr. Man with the Master Plan" <null@null.net>
Message-ID: <dKcJe.20921$sf6.3944@fe08.lga>
Source record: 1903

Yes.

I made my first contacts using a DR-605 when I first got into the hobby.
You can have pretty good luck with a discone even.

-MMWTMP

"RJ" <rajohngm@worldnet.att.net> wrote in message
news:mKwHe.528073$cg1.155700@bgtnsc04-news.ops.worldnet.att.net...
> Will an Alinco DR-605T provide the capabilities for working through
> satellites by simultaneity receiving on VHF and transmitting on UHF?
> Tnx, Bob AA8X
>

340. Re: FT817 for satellite

Newsgroup: rec.radio.amateur.space
Date: 2005-08-07 00:41:59 UTC
From: "Mr. Man with the Master Plan" <null@null.net>
Message-ID: <vNcJe.20922$sf6.4503@fe08.lga>
Source record: 1904

just store them as an crossband odd split (display will end up showing +-). store it so you listen on 430Mc and TX on 145Mc. I programmed mine from the computer , but the manual does show how to do it. Just make sure you are courteous in suign this set up as realy the best way is to listen to yourslef on the downlink to make sure you are listenable and not just noise or talking over or interferieng with someone.

-MMWTMP

"Brian Reay" <see@website.invalid> wrote in message news:xc8Ge.13000$bT4.7688@newsfe1-gui.ntli.net...
> Has anyone used memory pairs, as per the FT817 manual (page 77) for
> satellite use?
>
> If so, how did you find it?
>
> --
> Brian Reay
> www.g8osn.org.uk
> www.amateurradiotraining.org.uk
> FP#898
>
>

341. Re: Space Shuttle STS-114

Newsgroup: rec.radio.amateur.space
Date: 2005-08-07 00:49:54 UTC
From: "Mr. Man with the Master Plan" <null@null.net>
Message-ID: <WUcJe.20923$sf6.2476@fe08.lga>
Source record: 1905

Gee, "yes" was a good answer, but my answer is much better

http://www.monitoringtimes.com/nasa.html

I did here from people in a few yahoo groups that they heard ops in the UHF
mil band on lift off well into the northern CONUS and even the UK

"Mike" <Mike@nowhere.net> wrote in message
news:qwZBe.93086$wr.64749@clgrps12...
> On Tue, 12 Jul 2005 18:48:01 -0500, Space Junkie wrote:
>
>> Yes.
>
>> Space Junkie.
>
> You are a ass.
>
> Mike

342. ANS-219 AMSAT Weekly News Bulletins

Newsgroup: rec.radio.amateur.space
Date: 2005-08-08 17:36:19 UTC
From: JoAnne Maenpaa <wb9jej_no-spam@earthlink.net>
Message-ID: <nKMJe.2648$Je.1362@newsread2.news.atl.earthlink.net>
Source record: 1906

AMSAT NEWS SERVICE
ANS-219

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* AMSAT-NA Space Symposium Announcement
* PCSAT2 Installed and Activated on the ISS
* AMSAT-UK Reports PO-28 to Return to Amateur Satellite Service
* September 27 is the New Launch Date for SSETI
* Satellite DXpedition to JW-Svalbard Announced
* OSCAR-11 is Still Alive
* New OSCAR FM Help Page
* AMSAT-Argentina Unveils On-line Amateur Radio Calculator
* AMSAT Awards This Week
* ARISS Status for the week of August 1, 2005
* PCSAT2 Telemetry Guide

SB SAT @ AMSAT $ANS-219.01
AMSAT-NA Space Symposium Announcement

AMSAT News Service Bulletin 219.01
From AMSAT HQ SILVER SPRING, MD.
August 7, 2005
To All RADIO AMATEURS
BID: $ANS-219.01

Space! Ham radio goes there and you can join in the fun! Come to the AMSAT Technical Symposium and Annual Meeting this fall in lovely Lafayette, Louisiana. Education and technical sessions begin on Friday, the 7th of October. Technical, field ops, and the IARU forum follow through Sunday the 9th of October. Enjoy the best of Acadian Louisiana with Friday's "Shrimp Boil," Saturday's Banquet with great prizes, and Sunday's "Swamp Tour."

Register on line! For more, see:
http://www.amsat.org/amsat-new/symposium/.

[ANS thanks the AMSAT Symposium team for the above information]

/EX

SB SAT @ AMSAT $ANS-219.02
PCSAT2 Installed and Activated on the ISS

AMSAT News Service Bulletin 219.02
From AMSAT HQ SILVER SPRING, MD.
August 7, 2005
To All RADIO AMATEURS
BID: $ANS-219.02

PCSAT2 was installed on the exterior of the International Space Station and was activated on August 3, 2005.

The PCSAT2 mission is intended as an opportunity to augment existing ARISS communications experiments with an external autonomous communications payload. In this regard, it has several potential uses:

* A UI-Digipeater to help ease congestion on the currently shared ARISS PMS (Packet Mail system)

* A PSK-31 transponder for multi-user communications to improve accessibility for schools and ARISS outreach programs.

* An FM Voice repeater for full duplex crew communications to facilitate crew-to-school ARISS contacts.

* Routine Telemetry on the spacecraft systems

The current mode available for amateur radio use activated on August 3 includes 1200 and 9600 baud telemetry on 437.975 +/- 9 KHz of Doppler shift. Conventional 1200 baud APRS IGate stations are encouraged to tune over to the downlink and feed anything you capture.

9600 baud capable stations are encouraged to capture the special 9600 baud downlink and email to PC2@grc.nasa.gov and if they have IGate software (or the latest ALOGGER 2.0.2) to feed it live to: satgate.aprsca.net port 20150. (ALOGGER2.02 is available from: http://www.billdiaz.dynip.com/)

Please, no transmissions on the uplink. The PCSAT2 Team will announce when the satellite is open for general use in a few weeks.

The PCSAT2 web pages are temporarily unavailable because the server at the U.S. Naval Academy is without power for several days. When this server is restored see:
http://web.usna.navy.mil/~bruninga/pcsat2.html

An on-line overview of PCSAT2 telemetry can be found at:
http://www.pcsat2.info

1200 baud telemetry is just an occasional packet every 10 or 60 seconds. 1200 baud stations can simply feed their downlinks directly into the global APRS system like normal. These will help update the LIVE PCSAT2 telemetry page by G4DPZ at:
http://www.pcsat2.info/PCSat2Web/RealTime.jsp

PCSAT2 was mentioned at SlashDot ...
http://science.slashdot.org/science/05/08/04/0053242.shtml?tid=160&tid=126

Packets seen from PCSAT2 can be reviewed at:
http://www.findu.com/cgi-bin/pcsat2.cgi

A screen shot of both the 9600 bps and 1200 bps decoded data
as seen by Simon, 9W2QC, can be seen at:
http://www.9w2qc.net/pcsat2/

Tuning hints for doppler shift: At AOS the UHF signal from PCSAT2
will be as much as 9 KHz high and at LOS will be as much as 9 KHz
low. But at these times the doppler is *changing* the least and
this is probably the best time to catch a complete file without any
tuning glitches.

In the middle of the pass, the Doppler rate of change is the highest
and although the signal will be strongest, over the center 2 minutes
the doppler will shift as much as 8 KHz! This is why we expect to
have to combine files from multiple users to get a complete set of
data.

[ANS thanks Bob, WB4APR, and Dave, G4DPZ for the above information]

/EX

SB SAT @ AMSAT $ANS-219.03
AMSAT-UK Reports PO-28 to Return to Amateur Satellite Service

AMSAT News Service Bulletin 219.03
From AMSAT HQ SILVER SPRING, MD.
August 7, 2005
To All RADIO AMATEURS
BID: $ANS-219.03

PO-28 (POSAT-1), Portugal's first satellite, launched 12 years ago,
will be turned over to Amateur Radio use in the very near future. That
was the word July 30 from AMSAT-UK Secretary Jim Heck, G3WGM, during the
AMSAT-UK International Space Colloquium in Guildford, England.

Launched September 25, 1993, the satellite operated as a packet store-
and-forward BBS (9600 baud FM FSK) on Amateur Radio frequencies for several
weeks in early 1994. Over the years, PO-28's primary usage has been commer-
cial, although plans have called for eventually shifting its operation to
ham radio use. G3WGM reports that following lengthy negotiations it has
been agreed that the satellite can be switched permanently to amateur
frequencies. The changeover is expected to take a couple of weeks.

The Portuguese satellite was built at the University of Surrey as part of a
collaborative satellite technology program that involved industry and
academe. Uplink frequencies will be 145.925 and 145.975 MHz. Downlink
frequencies will be 435.250 and 435.275 MHz. More information on PO-28
is on the AMSAT Web site http://www.amsat.org/amsat/sats/n7hpr/po28.html.

Uplink Frequencies: 145.925 and 145.975 MHz
Downlink Frequencies: 435.250 and 435.275 MHz

Orbit: 822 x 800 km, 98.6 deg inclined, sun-synchronous.

Transponder capabilities include FM repeater and 38k4 data. If you want to hear how loud this satellite is, listen on 429.950 until the change back to amateur radio service.

Keplerian elements for PO-28 are not currently contained in the AMSAT keps bulletins, but can be found at Celestrak in amateur.txt using the name "POSAT". Users of Space Track should query the NORAD Satellite ID number 22829. The name listed by Space Track is "EYESAT A".

[ANS thanks Jim, G3WGM, Trevor, M5AKA, and the ARRL Letter for the above information]

/EX

SB SAT @ AMSAT $ANS-219.04
September 27 is the New Launch Date for SSETI

AMSAT News Service Bulletin 219.04
From AMSAT HQ SILVER SPRING, MD.
August 7, 2005
To All RADIO AMATEURS
BID: $ANS-219.04

Graham, G3VZV, has advised AMSAT that the revised launch date for SSETI Express and the other satellites on the DMC3 COSMOS launch has been confirmed as September 27th - so please keep those fingers crossed!

[ANS thanks Graham, G3VZV, for the above information]

/EX

SB SAT @ AMSAT $ANS-219.05
Satellite DXpedition to JW-Svalbard Announced

AMSAT News Service Bulletin 219.05
From AMSAT HQ SILVER SPRING, MD.
August 7, 2005
To All RADIO AMATEURS
BID: $ANS-219.05

Howard Long, G6LVB, will be travelling to Svalbard (JW prefix, 78.15 deg N, 16.02 deg E) around the 26, 27 and 28 August timeframe. The main purpose of the trip will be to install upgrades to a satellite station at www.svalsat.com. Howard intends to bring LEO satellite gear with him.

Due to its northerly location, Svalbard has coverage to Canada and the North Eastern US as well as Japan.

Howard states, "I will definitely be active on AO-51, SO-50, AO-27, PO-28 (let's hope) and if I have room for SSB equipment I will operate

FO-29, VO-52 and possibly AO-7. The ISS never travels far enough North for me to take a shot at it. There are no plans to take any HF gear."

[ANS thanks Howard, G6LVB, for the above information]

/EX

SB SAT @ AMSAT $ANS-219.06
OSCAR-11 is Still Alive

AMSAT News Service Bulletin 219.06
From AMSAT HQ SILVER SPRING, MD.
August 7, 2005
To All RADIO AMATEURS
BID: $ANS-219.06

Clive Wallis wrote, "Very many thanks for all the recent reports of OSCAR-11, on AMSAT-BB and by direct e-mails. I received the good news, on Saturday morning, while at the AMSAT-UK Colloquium. This was entirely unexpected!

When I returned home on Sunday, I heard the passes at 17:21 & 19:02 UTC, and have heard many others since.

Signals seem to be weaker than usual. However,since I last heard the satellite on 30 April, I've reinstalled my antennas , which makes comparisons difficult.

All the analogue telemetry channels, 0 to 59 are zero, ie they have failed. The status channels 60 to 67 are still working. One bit in channel 62, DSR mode, has changed from WRITE to READ. DSR is the Digital Store & Readout experiment. This could be significant if the experiment is still drawing current, but the other status bit indicates thet it is switched OFF.

The on-board clock is now showing a very large error. It has lost approximately 15 days since 30 April. I'll be monitoring the clock closely to see whether it changes at a constant rate, in future passes.

Eclipses should end around mid August. That should help the satellite to continue transmitting.

If the watchdog timer is still working, the satellite should switch OFF in the next 10 to 20 days. I would appreciate if listeners could just make a note of the DATE & UTC time when they hear the satellite, so that when it switches OFF we can determine when it was last heard. Please post your reports to AMSAT-BB or e-mail me direct g3cwv@amsat.org, but NOT until it switches OFF!

[ANS thanks Clive, G3CWV, for the above information]

/EX

SB SAT @ AMSAT $ANS-219.07
New OSCAR FM Help Page

AMSAT News Service Bulletin 219.07
From AMSAT HQ SILVER SPRING, MD.
August 7, 2005
To All RADIO AMATEURS
BID: $ANS-219.07

John Bailey, KG4BNP, reported, "I have finished updating the KG4BNP FM Oscar help website. I would appreciate feedback from users. We use it locally in Tallahassee, FL to help new hams break into the world of FM satellites. Mypersonal email is kg4bnp@earthlink.net."
For FM Oscar Help Webpage see: http://www.home.earthlink.net/~kg4bnp

[ANS thanks John, KG4BNP, for the above information]

/EX

SB SAT @ AMSAT $ANS-219.08
AMSAT-Argentina Unveils On-line Amateur Radio Calculator

AMSAT News Service Bulletin 219.08
From AMSAT HQ SILVER SPRING, MD.
August 7, 2005
To All RADIO AMATEURS
BID: $ANS-219.08

AMSAT-Argentina has added an amateur radio calculator feature to their web page. Do you need to calculate space attenuation, height vs coverage, coordinates of geosats, the resistor color codes, wavelength, resonance, Power budget, coil turns for, look up a location, coax length/type & loss?

Try the easy, on-line calculators at http://www.amsat.org.ar?f=h

[ANS thanks Pedro, LU7ABF, for the above information]

/EX

SB SAT @ AMSAT $ANS-219.09
AMSAT Awards This Week

AMSAT News Service Bulletin 219.09
From AMSAT HQ SILVER SPRING, MD.
August 7, 2005
To All RADIO AMATEURS
BID: $ANS-219.09

Bruce Paige, KK5DO, AMSAT Director Contests and Awards, says, This week, congratulations go out to:

Jim Wright, WA4IVM, for earning the 51 on 51 Award #31

To see all the awards visit http://www.amsat.org.

[ANS thanks Bruce, KK5DO, for the above information]

/EX

SB SAT @ AMSAT $ANS-219.10
ARISS Status for the week of August 1, 2005

AMSAT News Service Bulletin 219.10
From AMSAT HQ SILVER SPRING, MD.
August 7, 2005
To All RADIO AMATEURS
BID: $ANS-219.10

ARISS Status for the week of August 1, 2005

1. SuitSat Status
The ARISS-Russia team requested that a few fabric ARISS logo patches be provided to place on the bags which will contain the SuitSat hardware during flight. The U.S. team ordered and received the patches and will deliver these to Sergey Samburov at the U.K. meeting. Integration and testing continue as the team works on the hardware flight certification.

2. PCSAT2/MISSE5 Delivered to ISS
PCSAT2 flew on the Return to Flight STS-114 mission, which launched Tuesday, July 26. It was deployed during the third EVA on August 3. An on-orbit checkout needs to be performed before it becomes available to users on the ground. This may take a week or two. The project is described in detail on Bruninga's website, "PCSAT2 - External ISS Experiment in the Amateur Satellite Service." See the site for updates and telemetry data. (Occasional outages of this server may occur, please re-try later if you are not successful.)
http://www.ew.usna.edu/~bruninga/pcsat2.html

3. ARISS International Meeting, Guildford, U.K.
The AMSAT-UK Colloquium was held at the University of Surrey in Guildford, U.K. on Friday, July 29 through Sunday, July 31. The ARISS International Meeting convened August 1 - 2. Information on both meetings may be found on the following website:
http://www.uk.amsat.org/Colloquium/default.php

[ANS thanks Carol Jackson, KB3LKI for the above information]

/EX

SB SAT @ AMSAT $ANS-219.11
PCSAT2 Telemetry Guide

AMSAT News Service Bulletin 219.11
From AMSAT HQ SILVER SPRING, MD.
August 7, 2005
To All RADIO AMATEURS
BID: $ANS-219.11

Bob Bruninga, WB4APR, of the U.S. Naval Academy Satellite Lab, the developers of PCSAT2 released a preliminary guide for the reading and understanding of the PCSAT2 telemetry.

Here is what to look for on the PCSAT2 telemetry screen. Dave, G4DPZ,
has done an *fantastic* translation of the original DOS version of
PCSAT2 telemetry decoder to a real-time web format:

http://www.pcsat2.info/PCSat2Web/RealTime.jsp

The telemetry is in 4 packets, numbered 00,01,10,11. That is why
every telemetry channel has one of those numbers by it so you can see
which packet contains which value. They are transmitted every 10, or 20,
or 60 seconds depending on the rate we need to receive the telemetry.
This means it can take 40 sec, or 1 min 20s or 4 minutes to get a complete
snapshot.

The upper right shows the TIME of each of these 4 packets last heard. Colors
show latency. Brighter colors are more recent. Every packet has a serial
number which is incremented each packet.

The raw packet is at the top and you can see the SOURCE callsign of who
IGAted it into the network.

Transmitters are bursty packet types and usually will show 0 since it is
rare to capture a 1 second current when the telemetry samples. Looking at
the temperature of the transmitter gives a better indication of how hard
it is working.

Remember PCSAT2 has no command/control processor. It is only a pair of
KPC-9612+ TNC's and we are only using their built-in telemetry and command
capability.

You can look at the eight 11111111 bits in EVERY telemetry packet (they
are the same) which shows the state of the 8 on/off bits. They are active
LOW. So 11111111 means everything is off. They are mostly identical on
the A and B side. Each bit is listed at the bottom of the page under
"Command Status".

The upper right shows the estimated Latitude/Longitude of the real-time
position of ISS NOW (not when the telemety sample was taken).

[ANS thanks Bob, WB4APR, for the above information]

/EX

73,
This week's ANS Editor,
JoAnne Maenpaa, WB9JEJ
WB9JEJ at amsat dot org

343. WSR-219 AMSAT Weekly Satellite Status Bulletin

Newsgroup: rec.radio.amateur.space
Date: 2005-08-08 17:37:10 UTC
From: JoAnne Maenpaa <wb9jej_no-spam@earthlink.net>
Message-ID: <aLMJe.2649$Je.1649@newsread2.news.atl.earthlink.net>
Source record: 1907

```
This report is organized into 4 parts.
Part 1 - operational analog amateur satellites.
Part 2 - operational digital amateur satellites.
Part 3 - non - operational satellites
Part 4 - proposed satellites

SB SAT @ AMSAT <KB9MMC $ANS-219.S1
WSR 219 Part 1 08/07/2005

AMSAT NEWS SERVICE BULLETIN 219.S1 FROM AMSAT HQ
SILVER SPRING, MD, AUGUST 7, 2005
TO ALL RADIO AMATEURS
BID: $ANS-219.S1

VO-52 HAMSAT
Catalog Number: 28650
Launch Date: May 05,2005

Status: On orbit
Current Mode: U/V

Proposed frequencies:
-------------------
Indian transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacom : 145.940MHz continue carier signal

Dutch transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacon : 145.860MHz 12WPM with CW message
[07242005]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - OFF
FM REPEATER - V/U HIGH POWER

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
Analog voice uplink: 145.880 MHZ FM
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone
```

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

Current scheduled operating modes:

15 Aug
FM Repeater, V/S
Uplink: 145.920 mhz FM, 67hz PL Tone
Downlink 2401.200 mhz FM

22 Aug
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital

[ANS-WSR thanks Mike, KE4AZN for the above information]
[07312005]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz (67.0 Hz PL tone) (See below for operating
procedures)
Downlink: 436.795 MHz

There have been unconfirmed reports on the amsat-bb remailer that SO-50 has
shifted downlink frequency as much as 5khz up. This both from Europe.

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The
order of operation is thus: (allow for Doppler as necessary)

1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm
the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT
the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window
will reset the 10 minute timer.
[09122004]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplink: 145.850 145.870 145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

John, N4QWL reports on July 16th, 2005:

Last evening I had a AOS to LOS qso with WI2W. FO-29 came up at 01:17z here in FM07 and I found WI2W and we chatted until 01:33z. The satellite was at 2 degrees elevation when I finally heard him start to crackle a bit. What a great QSO! To think that I watched this bird launch back in 1996 and it is still working so well is a real thrill. I believe I still have the video. I might just look for it and watch it again. Boy do I love this satellite stuff!
Look for you all up there.

Please send the reception reports to lab2 'at' jarl.or.jp.
Please use the subject line: 'FO-29 reception report'.

Mineo, JE9PEL, has an FO-29 satellite telemetry analysis program that will automatically analyze all digital telemetry from the satellite (such as current, voltage and temperature). FO29CWTE is available at:
http://www.ne.jp/asahi/hamradio/je9pel/
[ANS-WSR wishes to thanks John, N4QWL for this week's report]
[07172005]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

The latest information on AO-27 from control operator Michael Wyrick, N3UC (former N4USI), can be found at:
http://www.ao27.org

An AO-27 question-and-answer page is available on the AMSAT-NA web site, with updates by Ray, W2RS. The URL is:
http://www.amsat.org/amsat/intro/ao27faq.html

[ANS-WSR thanks John, K6YK, for this week's AO-27 report]
[08292004]
=====
AO-7 AMSAT OSCAR 7

Catalog number: 07530
Launch Date: November 15, 1974

Status: Semi-operational in sunlight.
Return to active status: June 21,2002

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A
145.975 to 145.925 MHz CW/USB Mode B
Beacon: 29.502 MHz, 145.972 MHz, 435.1 MHz, 2304.1 MHz

Emily, W0EEC has created a website to allow the users of AO-7 to record
contacts, observations and use of the satellite more effectively at:
http://www.emilyshouse.com/experthams/ao7/main.php
This includes the ability to log contacts.

Tim, K3TZ has written a program to decode AO-07 telemetry.
The program can be downloaded at:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

For more AO-7 info:
http://www.amsat.org/amsat/sats/n7hpr/ao7.html
[11142004]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: U/V CROSS-BAND REPEATER
Digipeater: Inactive

The current Expedition 11 crew is:
Commander Sergei Krikalev
Flight Engineer John Phillips

Worldwide packet uplink: 145.990 MHz FM
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM
Doppler Shift is 10 KHz

Russian callsigns: RS0ISS, RZ3DZR
USA callsign: NA1SS
Packet station mailbox callsign: RS0ISS-11
Packet station keyboard callsign: RS0ISS-3
Digipeater callsign: ARISS

This off the ARISS webpage:
http://www.rac.ca/ariss/oindex.htm#New%20ARISS%20Operations :

The ARISS program is pleased to announce that the amateur radio equipment aboard the International Space Station is now operating in cross-band repeat mode. We realize that many of you will miss the packet-operating mode. However, cross-band repeat allows further experimentation of the ISS amateur radio system

The downlink for this operating mode remains the same, so listen for the stat-
ion on 145.80 MHz. The new uplink frequency is 437.80 MHz. All frequencies are
subject to Doppler shifting. For further information on working satellites and
adjusting for Doppler shift, please review Emily Clark's (W0EEC) excellent presentation on AMSAT's website:
http://www.amsat.org/amsat-new/information/faqs/Intro_sats.pdf

The ISS daily crew schedule can be found at:
http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is NOT
translated from Russian and posted.

More information is available at:
http://www.rac.ca/ariss
http://spaceflight.nasa.gov/station/reference/radio/
http://www.marexmg.org/fileshtml/unprotopage.html
http://www.issfanclub.com
http://oscar.dcarr.org/
[07242005]
NNNN
/EX

SB SAT @ AMSAT <KB9MMC $ANS-219.S2
WSR 219 Part 2 08/07/2005

AMSAT NEWS SERVICE BULLETIN 219.S2 FROM AMSAT HQ
SILVER SPRING, MD, AUGUST 7, 2005
TO ALL RADIO AMATEURS
BID: $ANS-219.S2

AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - OFF
FM REPEATER - V/U HIGH POWER

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
Analog voice uplink: 145.880 MHz FM
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

Current scheduled operating modes:

15 Aug
FM Repeater, V/S
Uplink: 145.920 mhz FM, 67hz PL Tone
Downlink 2401.200 mhz FM

22 Aug
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital

[ANS-WSR thanks Mike, KE4AZN for the above information]
[07312005]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Non-Operational?????

Uplink/downlink: 145.827 MHz 1200 baud AX.25 AFSK via W3ADO-1
Aux/Uplink: 435.250 MHz 9600 baud via PCSAT-2 (off)
APRS Downlink: 144.390 MHz (Region 2)

PCSat is a 1200-baud APRS digipeater designed for use by stations using
hand-held or mobile transceivers. Downlinks feed a central web site at:
http://pcsat.aprs.org

The APRS-equipped PCSat was built by midshipmen from the U.S. Naval Academy
under the guidance of Bob Bruninga, WB4APR.
[07242005]
=====
CUTE-1
Catalog number: 27844
Launched: June 30,2003

Status: Operational

Uplink: ?
Downlink: 436.8375 CW
437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)
Cliff, K7RR reports:
In the latest Weekly Satellite Report, CUTE 1, #27844 is listed as

OPERATIONAL?
Indeed it is very operational as a CUBESAT sending CW telemetry on
436.8345 MHz. At the July 7 2005, 23:45:20 pass over the Western USA:
CUTE 1 6B A4 xx 7F D7 66A8 4702 FF FF7C 65
CUTE 1 6C A6 59 80 D9 66A8 4702 FF FE7C B6

The June 30th KEPS were within ten seconds of AOS and LOS. It is an very
good object to practice tracking as the orbit and transmitter power are
similar to proposed CUBESATS awaiting launch this December. As a check for
Doppler correction, the lack of change in tone is an excellent indicator.

CUTE 1 is a Japanese (Tokyo Institute of Technology) one kilogram
nanosatellite that was launched by a Rokot rocket from Plesetsk at
14:15 UT on 30 June 2003. It carries a 100 mW beacon at 436.8375 MHz.
Initial orbital parameters were period 101.4 min, apogee 831 km, perigee
819 km, and inclination 98.7?.

For further info about CUTE-1 goto:
http://lss.mes.titech.ac.jp/ssp/cubesat/operation/Schedule_e.html

[ANS WSR wishes to thank Cliff, K7RR, for this week's information]
[07242005]
=====
GO-32 TECHSAT-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
(435.325 n/a - temperature problems)
Uplinks: 145.850, 145.890, 145.930 FM
1269.700, 1269.800, 1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[03132005]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink: 145.850 or 145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz
Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK

Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[05152005]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for
APRS users.

Uplink: 145.90 145.92 145.94 145.96 MHz FM
(using 1200-baud Manchester FSK)
Downlink: 437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon: 2401.1428 MHz
Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

A WOD collection of current graphics along with general information
and telemetry samples can be found at:
http://www.telecable.es/personales/ea1bcu
[05092004]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational?

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK).
approx. 10 days ON, 10 days OFF
Mode-S Beacon: 2401.500 MHz. ... OFF
UHFBeacon: 435.025 MHz. ... OFF

Clive Wallis wrote, "Very many thanks for all the recent reports of
OSCAR-11, on AMSAT-BB and by direct e-mails. I received the good news,
on Saturday morning, while at the AMSAT-UK Colloquium. This was entirely
unexpected!

When I returned home on Sunday, I heard the passes at 17:21 & 19:02 UTC,
and have heard many others since.

Signals seem to be weaker than usual. However,since I last heard the
satellite on 30 April, I've reinstalled my antennas , which makes
comparisons difficult.

All the analogue telemetry channels, 0 to 59 are zero, ie they have
failed. The status channels 60 to 67 are still working. One bit in
channel 62, DSR mode, has changed from WRITE to READ. DSR is the
Digital Store & Readout experiment. This could be significant if the

experiment is still drawing current, but the other status bit indicates thet it is switched OFF.

The on-board clock is now showing a very large error. It has lost approximately 15 days since 30 April. I'll be monitoring the clock closely to see whether it changes at a constant rate, in future passes.

Eclipses should end around mid August. That should help the satellite to continue transmitting.

If the watchdog timer is still working, the satellite should switch OFF in the next 10 to 20 days. I would appreciate if listeners could just make a note of the DATE & UTC time when they hear the satellite, so that when it switches OFF we can determine when it was last heard. Please post your reports to AMSAT-BB or e-mail me direct g3cwv@amsat.org, but NOT until it switches OFF!

[ANS-WSR thanks Clive, G3CWV, for the above information]

More information on UO-11 OSCAR-11 can be found at:
http://www.users.zetnet.co.uk/clivew/

MPEG3 files can be found here at Mineo, JE9PEL website:
http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm

[08072005]
NNNN
/EX

SB SAT @ AMSAT <KB9MMC $ANS-219.S3
WSR 219 Part 3 08/07/2005

AMSAT NEWS SERVICE BULLETIN 219.S3 FROM AMSAT HQ
SILVER SPRING, MD, AUGUST 7, 2005
TO ALL RADIO AMATEURS
BID: $ANS-219.S3

THE FOLLOWING ARE IN ORBIT BUT ARE
NON-OPERATIONAL AT THIS TIME:

POSAT-1 PO-28
Catalog Number: 22829
Launched : September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 435.250 MHz
435.275 MHz

Uplink: 145.925 MHz
145.975 MHz

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

PO-28 (POSAT-1), Portugal's first satellite, launched 12 years ago, will be turned over to Amateur Radio use in the very near future. That was the word July 30 from AMSAT-UK Secretary Jim Heck, G3WGM, during the AMSAT-UK International Space Colloquium in Guildford, England.

Launched September 25, 1993, the satellite operated as a packet store-and-forward BBS (9600 baud FM FSK) on Amateur Radio frequencies for several weeks in early 1994. Over the years, PO-28's primary usage has been commercial, although plans have called for eventually shifting its operation to ham radio use. G3WGM reports that following lengthy negotiations it has been agreed that the satellite can be switched permanently to amateur frequencies. The changeover is expected to take a couple of weeks.

The Portuguese satellite was built at the University of Surrey as part of a collaborative satellite technology program that involved industry and academe. Uplink frequencies will be 145.925 and 145.975 MHz. Downlink frequencies will be 435.250 and 435.275 MHz. More information on PO-28 is on the AMSAT Web site http://www.amsat.org/amsat/sats/n7hpr/po28.html.

Uplink Frequencies: 145.925 and 145.975 MHz
Downlink Frequencies: 435.250 and 435.275 MHz

Orbit: 822 x 800 km, 98.6 deg inclined, sun-synchronous.

Transponder capabilities include FM repeater and 38k4 data. If you want to hear how loud this satellite is, listen on 429.950 until the change back to amateur radio service.

Keplerian elements for PO-28 are not currently contained in the AMSAT keps bulletins, but can be found at Celestrak in amateur.txt using the name "POSAT". Users of Space Track should query the NORAD Satellite ID number 22829. The name listed by Space Track is "EYESAT A".

More information of POSAT-1 can be found at:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
http://www.amsat.org/amsat/sats/n7hpr/po28.html
[ANS-WSR wishes to thanks Trevor, M5AKA and Jim, G3WGM, for this week's information.]
[08072005]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon: 145.810 MHz (unmodulated carrier)

AO-10 has been locked into a Mode-B, 70-cm uplink and 2-meter downlink for several years.

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html

[05092004]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Non-operational

Uplink: 145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink: 435.812 MHz SSB
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Alberto E. Zagni - I2KBD reports on 02/13/05
The spacecraft is in MBL (safe mode) and is trasmitting just 6 channels
of telemetry. Temperatures and voltage are nominal, but there seems to
be a problem with the onboard receiver, refusing to accept commands.
The spacecraft was launched in 1993, thus nearing 12 years in orbit...

Best regards
Alberto E. Zagni - I2KBD
ITAMSAT Mission Director

More information of IO-26 can be found at:

http://joshua.micronet.it/english/itamsat/itamsathome.html
http://www.amsat.org/amsat/sats/n7hpr/io26.html
www.itamsat.org

[02132005]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon: 29.408 MHz
Robot: 29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB
Beacon: 145.860 MHz
Robot: 145.908 MHz
[05232004]

=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB
Beacon: 29.352 MHz (intermittent)
SSB meeting frequency: 29.380 MHz (unofficial)

John, KD6PAG reports on June 16, 2004 to ANS:
RS-15 beacon seemed to be back in the mode where it's a tone about 5 seconds
off and then 5 seconds on this morning.

ANS is looking for more confirmations of RS-15 coming back.

[ANS thanks John, KD6PAG for RS-15 information]
[06202004]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplink: 145.84 145.86 145.88 145.90 MHz FM
(using 1200-baud Manchester FSK)
CW downlink: 437.125 MHz
Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)
Broadcast Callsign: LUSAT-11

BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM
Broadcast Callsign: HLO1-11
BBS: HLO1-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a
non-operational status.
[05092004]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM (9600-baud FSK)
Downlink: 436.500 MHz FM
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink frequency (listed on the PanSat web site) 436.500 MHz

The satellite is not available for general uplink transmissions.

The Naval Postgraduate School developed PanSat. At the time of
launch, PanSat spread-spectrum digital transponders were to
be available to Amateur Radio operators along with software to utilize
this technology.

The satellite is still operating, however, the spread spectrum packet
radio portion never took place. The spacecraft is now beyond it's
initial 2-year mission life, but telemetry records are still being
downloaded.

For more information, visit the official PanSat web site at:
http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS has no further information]
[05232004]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlink: 437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA
web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplink V-band 145.840 - 145.990 MHz CW/LSB
U-band 435.550 - 435.800 MHz CW/LSB
L1-band 1269.250 - 1269.500 MHz CW/LSB
L2-band 1268.325 - 1268.575 MHz CW/LSB
S1-band 2400.350 - 2400.600 MHz CW/LSB
Downlink: S2-band 2401.225 - 2401.475 MHz CW/USB
K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon: 2401.323, 24,048.035
[05232004]

SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational
Downlink: 437.075 MHz
Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz
Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]
=====

NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
callsign KE6QMD, as per the user service agreement located at the following
URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Semi-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

AO-49 (SAFIR-M) is a German amateur radio payload onboard the small German
scientific satellite "RUBIN-2".

AO-49 was built by the German amateur radio association "AATiS
e.V." (German
acronym for "Arbeitskreis Amateurfunk und Telekommunikation in der Schule",
which means: 'working group for amateur radio anand telecommunications in
schools'). AO-49 is designed as a "store and broadcast" system for APRS
based messages, dedicated for the use of schools in combination with the
existing WX-Net and planned buoy experiments in Germany.

No transmissions detected since the 1st of February 2003! It appears
AO-49 is not properly aligned to illuminate the solar panels. This
should end soon. Due to its orbit, AO-49 will be in a phase without
eclipses until 13Feb03.

Martin DG8UAU has written a small software program "SAFIR-M Decoder" to
allow decoding of the received DATA0 frames. It is available at:
http://amend.gmxhome.de in the section Aktuelles.

Details on AO-49 (SAFIR-M) can be found at:
http://amend.gmxhome.de

Information about AATiS e.V. is available at:
http://www.aatis.de
[05092004]
NNNN

/EX

SB SAT @ AMSAT <KB9MMC $ANS-219.S4
WSR 219 Part 4 08/07/2005

AMSAT NEWS SERVICE BULLETIN 219.S4 FROM AMSAT HQ
SILVER SPRING, MD, AUGUST 7,2005
TO ALL RADIO AMATEURS
BID: $ANS-219.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE
PROPOSED FOR LAUNCH AT THIS TIME:

UCISAT ?O-??
Catalog number:
Proposed Launch Date: October 31, 2005

Status: Under Construction

Downlink: Submission in Progress
Uplink: Submission in Progress
Callsign: Submission in Progress

This from Matt Bennett, KF6RTB, UCISAT Communications Team Member:

Our website is www.ucisat.net .This is a new website, however, and doesn't
have the "Status" section active yet. Because of the growing interest in our
project, I'll push our webmaster to create updates (hopefully) on a week-to-
week basis. For now, the current status of the mission is as follows:

-Expected Launch Date: October 31st, 2005
-Frequency Allocation: Submission in Progress
-Construction Status: Sub-Assembly
[WSR to thank Matt Bennett, KF6RTB, for this week's report.]
[01302005]
=====
SSETI ?O-??
Catalog Number:
Proposed Launch Date: LATE 2005

Status: AWAITING LAUNCH

Graham, G3VZV reports:
We have now been advised that the revised launch date for SSETI Express and
the other satellites on the DMC3 COSMOS launch has been confirmed as
September
27th - so please keep those fingers crossed!

SpaceDaily has a report about SSETI at:
http://www.spacedaily.com/news/internet-04zzzu.html

You can find more info about SSETI at:
http://sseti.gte.tuwien.ac.at/WSW4/

Looking at the website for the SSETI Express webcam
http://sseti.gte.tuwien.ac.at/WSW4/webcam.htm

[ANS thanks Graham, G3VZV for the above information]
[07312005]
=====
PCSAT2 ?0-??
Catalog Number:
Proposed Launch Date: August 1, 2005

Status: Onboard International Space Station

PCSAT2 was installed on the exterior of the International Space
Station and was activated on August 3, 2005.

The PCSAT2 mission is intended as an opportunity to augment existing
ARISS communications experiments with an external autonomous communi-
cations payload. In this regard, it has several potential uses:

* A UI-Digipeater to help ease congestion on the currently shared
ARISS PMS (Packet Mail system)

* A PSK-31 transponder for multi-user communications to improve
accessibility for schools and ARISS outreach programs.

* An FM Voice repeater for full duplex crew communications to
facilitate crew-to-school ARISS contacts.

* Routine Telemetry on the spacecraft systems

The current mode available for amateur radio use activated on
August 3 includes 1200 and 9600 baud telemetry on 437.975 +/- 9 KHz
of Doppler shift. Conventional 1200 baud APRS IGate stations are
encouraged to tune over to the downlink and feed anything you capture.

9600 baud capable stations are encouraged to capture the special 9600
baud downlink and email to PC2@grc.nasa.gov and if they have IGate
software (or the latest ALOGGER 2.0.2) to feed it live to:
satgate.aprsca.net port 20150. (ALOGGER2.02 is available from:
http://www.billdiaz.dynip.com/)

Please, no transmissions on the uplink. The PCSAT2 Team will announce
when the satellite is open for general use in a few weeks.

The PCSAT2 web pages are temporarily unavailable because the server at
the U.S. Naval Academy is without power for several days. When this
server is restored see:
http://web.usna.navy.mil/~bruninga/pcsat2.html

An on-line overview of PCSAT2 telemetry can be found at:
http://www.pcsat2.info

1200 baud telemetry is just an occasional packet every 10 or 60
seconds. 1200 baud stations can simply feed their downlinks directly
into the global APRS system like normal. These will help update the
LIVE PCSAT2 telemetry page by G4DPZ at:

http://www.pcsat2.info/PCSat2Web/RealTime.jsp

PCSAT2 was mentioned at SlashDot ...
http://science.slashdot.org/science/05/08/04/0053242.shtml?tid=160&tid=126

Packets seen from PCSAT2 can be reviewed at:
http://www.findu.com/cgi-bin/pcsat2.cgi

A screen shot of both the 9600 bps and 1200 bps decoded data
as seen by Simon, 9W2QC, can be seen at:
http://www.9w2qc.net/pcsat2/

Tuning hints for doppler shift: At AOS the UHF signal from PCSAT2
will be as much as 9 KHz high and at LOS will be as much as 9 KHz
low. But at these times the doppler is *changing* the least and
this is probably the best time to catch a complete file without any
tuning glitches.

In the middle of the pass, the Doppler rate of change is the highest
and although the signal will be strongest, over the center 2 minutes
the doppler will shift as much as 8 KHz! This is why we expect to
have to combine files from multiple users to get a complete set of
data.

[ANS thanks Bob, WB4APR, and Dave, G4DPZ for the above information]

[08072005}
=====
PHASE 3E ?O-??
Catalog Number:
Proposed Launch Date: Early 2006

Status: Under Construction

William Leijenaar, PE1RAH reports on July 16th, 2005:

Hi AMSATs,

I always like to inform the AMSATs public about my P3e work, but
unfortunatly due to
some reasons there was not much time and nothing much to say...

However, now I am happy to announce that the my MODE-UV transponder design
for P3e is ready at the P3e integration place in Marburg (Germany). About 4
weeks ago I was in Marburg before, where the transponder has been checked.
Unfortunatly some unsure things were found in the design. The unsure things
were about long term stability after many years in space.

At home in The Netherlands, I changed the design with some minor changes to
have a secure long term stability. Finally I tested the transponder again
and it performed well within the specifications. Again something learned for
future transponder designs :o)

Last Wednesday I drove to AMSAT-DL P3e integrations place in Marburg again,
and have my transponder again checked. In the beginning it seemed that the

70cm receiver lost 10dB in sensetivity. After some more measurements we find out that it was due to a bad attenuator we used for protection at the input.

Together with Karl Meinzer we looked for any problems, but so far we could see (without HELAPS) all was okay. In the afternoon I went back home again, this time without the MODE-UV.

Now the MODE-UV will get a new home, the home of P3e... :o)
I hope the transponder will work like its elder sister in AO-10, and you all will enjoy it for many years...

It was lots of work to get it this far, but I know it is for a good purpose...

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/

[ANS-WSR wishes to thank William Leijenaar, PE1RAH for this week's report]
[07172005]
=====
CP1 ?o-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N6CP
Proposed Transmit Frequency: 436.845
[03272005]
=====
CP2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.325
[03272005]
=====
HAUSAT1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: D90HP
Proposed Transmit Frequency: 437.465
[03272005]
=====
ICE Cube 1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: W2CXM
Proposed Transmit Frequency: 437.305
[03272005]
=====

ICE Cube 2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N2VR
Proposed Transmit Frequency: 437.425
[03272005]
=====
ION ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.505
[03272005]
=====
KUTEsat ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: KC0RMW
Proposed Transmit Frequency: 437.385
[03272005]
=====
MEROPE ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: K7MSU-1
Proposed Transmit Frequency: 145.980
[03272005]
=====
nCUBE1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
2407.25
[03272005]
=====
RINCON ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
437.345
[03272005]
=====
SACRED ?O-??
Catalog Number:

Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SEEDS ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: JQ1YGU
Proposed Transmit Frequency: 437.485
[03272005]
=====
Mea Huaka ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.405
[03272005]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)

* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satelite Report Editor is James K. Darrow, KB9MMC.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

Via the ans mailing list at AMSAT.ORG courtesy of AMSAT-NA.
To unsubscribe, send "unsubscribe ans" to Majordomo@amsat.org

344. Radio Meteor Obs. Bull. July 2005

Newsgroup: rec.radio.amateur.space
Date: 2005-08-08 19:52:22 UTC
From: Chris Steyaert <observations@rmob.org>
Message-ID: <oudff1p6mi1cg76jh23q3d93s5k1tvisl4@4ax.com>
Source record: 1908
Cross-posted to: rec.radio.amateur.space,sci.astro.amateur

Radio Meteor Observation Bulletin No. 144 of July 2005 (63 K) is available now as

http://visualrmob.free.fr/rmobtext/rmob0507.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

http://radio.data.free.fr

Chris

345. Who invented the Y-factor method of noise measurement?

Newsgroup: rec.radio.amateur.space
Date: 2005-08-09 20:33:56 UTC
From: Dave <nospam@nowhere.com>
Message-ID: <42f91335@212.67.96.135>
Source record: 1909
Cross-posted to: sci.astro.seti,alt.astronomy,rec.radio.amateur.space,sci.astro.amateur

Sorry, I have asked everywhere else, so are trying another method.

Does anyone reading this list have a reference to the invention of the Y-factor method of measuring noise figure of RF/microwave devices? Any idea why it is called "Y-factor"? I'd like to find the oringinal rreference, but so far have been unable to.

It is well explained in HP/Agilent application notes, but no reference is made to the first publication of it.

Does anyone have any old references that mention the method, even if they don't reference it? Anything earlier than the mid 1950's?

If you do, please drop me an email at the address in the jpeg below.

http://www.medphys.ucl.ac.uk/~drkirkby/work-email2.jpg

346. Re: Who invented the Y-factor method of noise measurement?

Newsgroup: rec.radio.amateur.space
Date: 2005-08-09 21:49:25 UTC
From: Malcolm Stewart <malcolm_stewart@megalith.freeserve.co.uk>
Message-ID: <ddb8d6ukn1@newsm1.svr.pol.co.uk>
Source record: 1910
Cross-posted to: sci.astro.seti,alt.astronomy,rec.radio.amateur.space,sci.astro.amateur

"Dave" <nospam@nowhere.com> wrote in message news:42f91335@212.67.96.135...
> Sorry, I have asked everywhere else, so are trying another method.
>
> Does anyone reading this list have a reference to the invention of the
> Y-factor method of measuring noise figure of RF/microwave devices? Any
> idea why it is called "Y-factor"? I'd like to find the oringinal
> rreference, but so far have been unable to.
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> is made to the first publication of it.
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> Does anyone have any old references that mention the method, even if
> they don't reference it? Anything earlier than the mid 1950's?
>
>
> If you do, please drop me an email at the address in the jpeg below.
>
> http://www.medphys.ucl.ac.uk/~drkirkby/work-email2.jpg

Have you checked the MIT Radiation Lab series of text books covering radar
from WWII ? Seem to remember that was where I looked for authoritative
guidance when I made my noise measurements - back in 1965.

--
M Stewart
Milton Keynes, UK
http://www.megalith.freeserve.co.uk/oddimage.htm

347. Re: Who invented the Y-factor method of noise measurement?

Newsgroup: rec.radio.amateur.space
Date: 2005-08-10 22:06:26 UTC
From: Dave <nospam@nowhere.com>
Message-ID: <42fa7a63@212.67.96.135>
Source record: 1911
Cross-posted to: sci.astro.seti,alt.astronomy,rec.radio.amateur.space,sci.astro.amateur

Malcolm Stewart wrote:
> "Dave" <nospam@nowhere.com> wrote in message news:42f91335@212.67.96.135...
>
>>Sorry, I have asked everywhere else, so are trying another method.
>>
>>Does anyone reading this list have a reference to the invention of the
>>Y-factor method of measuring noise figure of RF/microwave devices? Any
>>idea why it is called "Y-factor"? I'd like to find the oringinal
>>rreference, but so far have been unable to.
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>>It is well explained in HP/Agilent application notes, but no reference
>>is made to the first publication of it.
>>
>>Does anyone have any old references that mention the method, even if
>>they don't reference it? Anything earlier than the mid 1950's?
>>
>>
>>If you do, please drop me an email at the address in the jpeg below.
>>
>>http://www.medphys.ucl.ac.uk/~drkirkby/work-email2.jpg
>
>
> Have you checked the MIT Radiation Lab series of text books covering radar
> from WWII ? Seem to remember that was where I looked for authoritative
> guidance when I made my noise measurements - back in 1965.
>
No I had not. I'll check that out.

348. Re: Who invented the Y-factor method of noise measurement?

Newsgroup: rec.radio.amateur.space
Date: 2005-08-12 05:24:35 UTC
From: Tim Killian <TJK@notmyrealemail.com>
Message-ID: <RoCdnZ2dnZ2eiS7TnZ2dnQ6vYd-dnZ2dRVn-0J2dnZ0@bresnan.com>
Source record: 1912
Cross-posted to: sci.astro.seti,alt.astronomy,rec.radio.amateur.space,sci.astro.amateur

Was it J. D. Kraus? When I performed Y-factor tests in the '70s, his works were always at hand.

Dave wrote:

> Sorry, I have asked everywhere else, so are trying another method.
>
> Does anyone reading this list have a reference to the invention of the
> Y-factor method of measuring noise figure of RF/microwave devices? Any
> idea why it is called "Y-factor"? I'd like to find the oringinal
> rreference, but so far have been unable to.
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> they don't reference it? Anything earlier than the mid 1950's?
>
>
> If you do, please drop me an email at the address in the jpeg below.
>
> http://www.medphys.ucl.ac.uk/~drkirkby/work-email2.jpg
>
>

349. Repeater On The Moon?

Newsgroup: rec.radio.amateur.space
Date: 2005-08-12 22:50:43 UTC
From: Tom <nospam@nospam.com>
Message-ID: <7J9Le.595708$cg1.4788@bgtnsc04-news.ops.worldnet.att.net>
Source record: 1913

Any plans to put a repeater on the moon now that we are going back to the moon?

[snip]

Details about Project Moonray

Nick thought of the idea of putting an amateur repeater on the moon in 1965 while the Apollo manned lunar explorations were taking place. He met with Owen Garriott, W5LFL, who was an astronaut in training. Owen was scheduled to go to the moon on the forthcoming Apollo 18 mission. Nick gave this amateur project the name Moonray, which was short for moon relay. The idea that he proposed to NASA and was accepted by them was to build a package small enough to fit under the seat of the Lunar Rover vehicle. It would fit in a space vacated by the exchange of batteries with fuel cells. Hopefully, Owen would be the driver of this vehicle and he would have been the person to erect the Moonray package on the surface of the moon. There was to have been a connector on the Moonray package so that Owen could plug in his spacesuit headset and make a few contacts with hams on Earth. He would have then left the assembled package on the moon operating as an open amateur repeater.

Nick planned to build a thermonuclear powered (50 WATT DC output) Plutonium 235 fueled unit with a half-life of 97 years. It was to be a 5 pound repeater package with a 432 MHz uplink receiver and 1296 MHz 3.5 watt output downlink transmitter. The repeater was to accept all modulation modes at the input and linearly translate these to the downlink transmitter. The repeater also was to have contained several interesting amateur experiments including a laser receiver, a slow-scan color TV system giving gross cloud cover pictures of the earth several times a day, and a 32 channel telemetry link to transmit a variety of experimental and housekeeping data.

The call SS in Morse code was to be the identifier and had been allocated and approved by the FCC. NASTAR's ground station was to be the secondary control link to turn the repeater on or off as needed, and the giant dish at Arecibo was to be the primary control in emergency or during unexpected repeater malfunctions.

Unfortunately, Congress cut off funding to NASA for all future Apollo missions and Project Moonray was shelved.

Nick was again president of Project OSCAR from 1994 until his death in January, 1996. He was going to present a new version of Project Moonray to the opening meeting of the 50MHz and Up Group of N. California but he passed away 3 days before the meeting took place.

[end snip]

Tom

350. Re: Who invented the Y-factor method of noise measurement?

Newsgroup: rec.radio.amateur.space
Date: 2005-08-13 22:12:56 UTC
From: Dave <nospam@nowhere.com>
Message-ID: <42fe7068@212.67.96.135>
Source record: 1914
Cross-posted to: sci.astro.seti,alt.astronomy,rec.radio.amateur.space,sci.astro.amateur

Tim Killian wrote:
> Was it J. D. Kraus? When I performed Y-factor tests in the '70s, his
> works were always at hand.

I've no idea. I have not looked at all the references that I have been
given, but so far have been unable to resolve it. I need to spend longer
in the library.

>
> Dave wrote:
>
>> Sorry, I have asked everywhere else, so are trying another method.
>>
>> Does anyone reading this list have a reference to the invention of the
>> Y-factor method of measuring noise figure of RF/microwave devices? Any
>> idea why it is called "Y-factor"? I'd like to find the oringinal
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>>
>> If you do, please drop me an email at the address in the jpeg below.
>>
>> http://www.medphys.ucl.ac.uk/~drkirkby/work-email2.jpg
>>
>>
>

351. ANS-226 AMSAT News Service Weekly Bulletin

Newsgroup: rec.radio.amateur.space
Date: 2005-08-14 16:54:25 UTC
From: JoAnne Maenpaa <wb9jej_no-spam@earthlink.net>
Message-ID: <5HKLe.7796$ns.3864@newsread1.news.atl.earthlink.net>
Source record: 1915

AMSAT NEWS SERVICE
ANS-226

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:

* ISS PCSAT2 PSK-31
* PCSAT2 Telemetry
* ARISS Status
* MRO Electra SDR
* AMSAT Awards

SB SAT @ AMSAT $ANS-226.01
ISS PCSAT2 PSK-31 Transponder is enabled

AMSAT News Service Bulletin 226.01
From AMSAT HQ SILVER SPRING, MD.
Aug 14, 2005
To All RADIO AMATEURS
BID: $ANS-226.01

PCSAT2 will operate in conjunction with all of the other exciting modes on the ARISS system such as voice, packet, repeater and SSTV modes. But because these are all multiple transceivers all on the same station, their operation have to be coordinated so there is no mutual interference.

It looks like PCSAT2 can best contribute at this time by operating in PSK-31 mode for the near future. This is a very exciting new transponder mode which solves the congestion problem on FM repeaters by letting multiple stations all communicate at the same time.

PSK-31 users are welcome to try out the new PCSAT2 PSK-31 transponder on ISS with an uplink on 29.402 +/- 1 KHz and downlink on 435.275 +/- Doppler using FM.

The FM downlink lets everyone operate full duplex and everyone to see the same view of the passband as everyone else. Thus you can see exactly what your signal looks like compared to everyone else.

Help Wanted: PCSat2 PSK-31 Operations Coordinator Needed

To save power and to avoid any potential interferece to any ISS
School contacts, the PSK-31 transponder is only on when a responsible
PC2PSK control station in the ISS/PCSat2 footprint turns it on.

If you are interested in PSK-31 operations and want to volunteer to
coordinate all the other operators and operations, then we have a
job for you. This PSK-31 operations coordinator, who has become fully
familiar with ARISS operations, can next start to organize the pass-by-
pass PSK-31 control ops.

Contact Bob Bruninga, WB4APR, at wb4apr@amsat.org if you wish to
volunteer as the PCSat2 PSK-31 coordinator. Until the PCSat2 team is
able to introduce the new coordinator please do not volunteer as a pass
control operator.

Refer to this page:
http://www.ew.usna.edu/~bruninga/pec/pc2ops.html

For information about the PCSat2 PSK-31 transponder and a diagram
showing a basic configuration for PSK-31 earth stations.

[ANS thanks Bob, WB4APR and the U.S. Naval Academy Satellite Lab
for the above information.]

/EX

SB SAT @ AMSAT $ANS-226.02
PCSAT2 Telemetry

AMSAT News Service Bulletin 226.02
From AMSAT HQ SILVER SPRING, MD.
Aug 14, 2005
To All RADIO AMATEURS
BID: $ANS-226.02

The PCSat2 team sends a, "Thank You!", to all of the AMSAT and
APRS stations feeding science and telemetry data from 437.975
to the APRS-IS. This data feeds the live telemetry page and lets
everyone see how the spacecraft is doing around the world:

http://www.pcsat2.info

We do, of course, need more stations feeding telemetry, especially
from those stations in unusual footprints such as Hawaii and remote
areas of the USA, Europe and downunder. More stations capable of
receiving and forwarding 9600 baud data would be especially helpful.

The PCSat2 telemetry team plans to write-up a set of turn-key
instructions on how to set up a satgate so that others not familiar
with APRS can easily join this satgate network. In the interim,
stations that wish to experiment and learn can begin using any version
of APRS or download the stand-alone ALOGGER 2.02 program from
http://www.billdiaz.dynip.com/.

To set up a satgate, just tune a radio and TNC to one of these
channels:

437.975 9600 bd for PCSAT2 data
437.975 1200 bd for PCSAT2 telemetry
145.800 for ARISS packet data
145.825 for the original PCsat

You will need to run your favorite APRS software and connect to
satgate.aprsca.net:10150. ALOGGER, mentioned previously now has
serial port support for a TNC as a satgate monitoring station.

For the overall PCSAT2 Operations system, see

http://www.ew.usna.edu/~bruninga/pec/pc2ops.html

[ANS thanks Bob, WB4APR and the U.S. Naval Academy Satellite Lab for
the above information.]

/EX

SB SAT @ AMSAT $ANS-226.03
ARISS Status

AMSAT News Service Bulletin 226.03
From AMSAT HQ SILVER SPRING, MD.
Aug 14, 2005
To All RADIO AMATEURS
BID: $ANS-226.03

ARISS Contact Schedule and Successful school list updated
2005-08-11 23:00 UTC

Well done STS-114! Welcome back!

Due to the STS-114 operation and planned ISS EVAs, ARISS school
contacts were canceled or postponed. We are back, the next contact
is set for 2005-08-17.

There was also a rumor that the ISS was having contacts on the 40
meter band. There is no HF equipment available yet.

Expedition 11 crew is now on the ISS. John Phillips KE5DRY
Sergei Krikalev U5MIR

Expedition 12 crew is expected to dock 2005-10-03. This means that
there will probably not be any ARISS contacts from the week before
docking until the week of 2005-10-24.

Expedition 12

William McArthur, KC5ACR up on 11S Soyuz, scheduled launch 2005-10-01
Valery Tokarev up on 11S Soyuz, scheduled launch 2005-10-01
Thomas Reiter DF4TR up on STS-121, scheduled launch 2005-09-22

The schedule page has been updated as of 2005-08-11 23:00 UTC.

Look for the updated and enhanced frequency chart for packet,
voice, and crossband repeater modes showing Doppler correction.

http://www.amsat.org/amsat/ariss/news/ISS_frequencies_and_Doppler_correction
.rtf

Several schools will be live simulcasted via the world wide web.
Check out the instructions for each school on the schedule page to get
to the audio streaming.

Additional instructions have been added on how to listen in when the
streaming audio is provided by MCI.

Also, please monitor the IRLP and Echolink webpages for possible
upcoming contacts that will be simulcast.

IRLP website at:

http://www.discoveryreflector.ca

This new site will have the links for simulcast contacts that have
IRLP and Echolink.

The successful school list has been updated as of 2005-07-21
04:00 UTC.

Check out the link on the schedule page to download a video that
Mike Fincke KE5AIT and Gennady Padalka RN3DT have produced of life
on the ISS.

The latest ARISS application, announcement and successful school
list is now available on the ARISS web site. There are several ARISS
web sites:

English: http://www.rac.ca/ariss/

French: http://c.avmdti.free.fr/ariss/index.htm

ARISS Europe: http://www.ariss-eu.org/

ARISS Japan: http://www.jarl.or.jp/ariss/

Other locations include:

Latest ARISS announcements and news
http://www.amsat.org/amsat/ariss/news/arissnews.txt

Successful school list
http://www.amsat.org/amsat/ariss/news/Successful_ARISS_schools.rtf

The ISS Fan Club website is:
http://www.issfanclub.com

K1ELA has a website at:
http://members.aol.com/k1ela/index.html

ON6SAT has a website at:
http://on6sat.com/links/

A listing of ARISS related magazine articles:
http://www.amsat.org/amsat/ariss/news/ARISS_magazine_articles.rtf

Currently the list includes articles from CQ, CQ VHF, QST, and
The AMSAT Journal. Please contact me directly if you have additional
suggestions.

[ANS thanks Charlie Sufana, AJ9N and SAREX for the above information]

/EX

SB SAT @ AMSAT $ANS-226.04
MRO Electra SDR post-lauch checkout

AMSAT News Service Bulletin 226.04
From AMSAT HQ SILVER SPRING, MD.
Aug 14, 2005
To All RADIO AMATEURS
BID: $ANS-226.04

Advance information, subject to change:

Post-launch checkout of the Electra software-defined UHF radio
aboard the Mars Reconnaissance Orbiter will be conducted on or about
26 September 2005. These tests will include CW transmissions during
spacecraft turns to verify the UHF quadrifilar helix antenna pattern.
Interested radio amateurs and amateur and professional radio-astron-
omers in North America with sensitive receiving capabilities at 437.1
MHz can attempt to receive the UHF signal from MRO during this test.

More details will follow.

Jan
WB6VRN

Electra Integration and Test Engineer
Flight Communications Systems Section
NASA Jet Propulsion Laboratory

[ANS thanks Jan, WB6VRV for the above information]

/EX

SB SAT @ AMSAT $ANS-226.05
AMSAT Awards

AMSAT News Service Bulletin 226.05
From AMSAT HQ SILVER SPRING, MD.
Aug 14, 2005
To All RADIO AMATEURS
BID: $ANS-226.05

This week, congrats go out to all of the following.

Greg Higgins, KB5GLV, Satellite Communicators Club
Wadhah Al-Tailji, AE6QG, Satellite Communicators Club

Aruni Perera, VE4WMK, 51 on 51 Award #32

To see all the awards visit http://www.amsat.org or
http://www.amsatnet.com

73...bruce

[ANS thanks Bruce Paige, KK5DO for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the
President's Club. Members of the President's Club, as sustaining donors
to AMSAT Project Funds, will be eligible to receive additional benefits.
Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Dave Johnson, G4DPZ
G4DPZ at amsat dot org

352. Re: Repeater On The Moon?

Newsgroup: rec.radio.amateur.space
Date: 2005-08-16 00:23:01 UTC
From: Brad Guth <ieisbradguth@yahoo.com>
Message-ID: <1124151781.165788.301120@f14g2000cwb.googlegroups.com>
Source record: 1916

Tom,
Good Christ Almighty; terrific notion of getting a repeater of any sorts on the moon. However, we can't seem to get squat deployed upon the moon unless it's capable of surviving a rather nasty impact as having planned upon more than a decade ago by the LUNAR-A mission that's still on hold.

Speaking about NASA/Apollo (the ultimate space-toilet of infomercials and disinformation-R-us crapolla), and of their continuing utter lack of having a shred worth of hard-science or that of any other believable evidence that's about as MOS infomercialism as it gets.

"AMIE obtained this image from an altitude of about 2000 kilometres. It covers an area of about 100 kilometres and shows the region around Hadley Rille centred at approximately 25° North and 3° East."
http://www.esa.int/SPECIALS/SMART-1/SEMB7A808BE_0.html
"The rille begins at the curved gash on the left side of this image, and is seen clearest in the rectangular, mare-floored valley in the centre of the image. It is over 120 kilometres long, and up to 1500 metres across and over 300 metres deep in places."
"The camera itself has a medium field of view of 5.3 degrees by 5.3 degrees and provides a high-resolution image at 27 metres per pixel from an altitude of 300 kilometres. The image measures 1024 x 1024 pixels. Data from the micro-imager are read and stored in the AMIE electronics, where they can be downloaded as required from the spacecraft."

Unfortunately, as for having been obtained from 2000 km isn't worth diddly squat compared to the 100 km advantage of the Apollo CM orbit and further boosted by way of using their 10X telephoto lens for a full frame magnification of roughly 38,400:1 as compared to imaging the same from Earth using their 1:1 lens.

The SMART-1/AMIE camera absolutely somewhat sucks at 180 m/pixel as compared to Kodak film and quality optics as utilized from the distance of 100 km, having been recorded upon essentially high resolution B&W (8192 x 8192 or 164 lpmm) format of film that I believe is worth something better than 1.8 m/pixel, and worth 256 bits per pixel at that. Still there's no sign of anything Apollo, unless somewhat recent impact craters are all that's showing us the truth.

Thus even if SMART-1 were to cruise to within 300 km and obtain it's somewhat bit-limited worth of 27 m/pixel isn't going to become worth even a tenth as good of what's already on file, and even that's of what's 35+ years old at that.

Too bad we can't manage to orbit something of a 100X optical that's
getting onto a 2.2 micron/pixel CCD populated chip of 10x10 mm, and of
accomplishing this robotic task at just 10 km off the deck, obviously
better than having to make due with the Mars Express imaging resolution
as having been obtained from 260+km that's actually limited to 7 micron
pixels that's clearly out dated by the latest CCD and a 200X lens or
mirror standard that should be able to beat that resolution at perhaps
obtaining something less than 150 mm of at least 16 bits/pixel,
although flying 10 km off the deck makes that worth 15 mm/pixel.
http://sci.esa.int/science-e/www/object/index.cfm?fobjectid=34826&fbodylongid=1597
Without applied PhotoShop "correspond to 2.3 metre square pixels
on-ground for a spacecraft altitude of 250 km."

As is, their 2.4 km x 2.4 km per frame as obtained from 250 km would
become 0.96 x 0.96 km per frame if utilized at 100 km off the lunar
surface, that's a raw 938 mm/pixel if there were no improvements in
lens or CCD applied.

Since we're only going for the moon, the 972 mm Matsukov-Cassegrain
telescope could be replaced with a 2000 mm and the CCD replaced with
the 2.2 micron/pixel, thus another 6.547 fold improvement would get
that resolution as obtained from 100 km down to 143.3 mm/pixel, then a
good application of PhotoShop shouldn't have any problem with creating
a believable 16 mm/pixel. Cut the orbit down to 10 km off the deck and
I believer we're into reading serial numbers off those supposed lander
remains, those items of our grand old cloak and dagger cold-war days of
disinformation-R-us and of spookology of utilizing all sorts of smoke
and mirrors on steroids, of which as far as I can tell still isn't over
until the fat lady sings.

Of course somewhat harsh spectrum cut-off and/or band-pass filtering
could be utilized, just in case the camera caught a look-see above the
horizon, thus the horrifically bright (near-blue & near-UV) worth of
the Sirius star system and otherwise nearly blindingly bright likes of
Venus could be diminished and/or later PhotoShop removed so that
there'd still be none of those stinking stars or that of a nearby Venus
by which anyone could actually figure out if the moon imaging was real
or not. We also wouldn't want to ever get a look-see at having Earth
above the fully solar illuminated but otherwise extremely dark lunar
surface that's showing us a somewhat reddish tint of a nearly coal dark
golden lunar hew instead of the composite of cornmeal and portland
cement and/or of a somewhat pumice like spectrum worth of gray tones as
to what the Apollo/EVA obtained images recorded (whatever you do, don't
look at anything of "moonpans" near white-out zones of lunar terrain).
~

Nondisclosure: in spite of an orchestrated status quo, seems there's
been other life upon Venus
http://guthvenus.tripod.com/gv-town.htm
Russian/China LSE-CM/ISS (Lunar Space Elevator) as interactive within
the ME-L1/EM-L2 sweet-spot
http://guthvenus.tripod.com/lunar-space-elevator.htm

Of Sirius, proto-moons, Venus & Earthly ETs & of somewhat testy topics
by; Brad Guth / GASA-IEIS
http://guthvenus.tripod.com/gv-topics.htm

353. Re: Repeater On The Moon?

Newsgroup: rec.radio.amateur.space
Date: 2005-08-16 04:18:30 UTC
From: Mike <Mike@nowhere.net>
Message-ID: <qOdMe.179309$9A2.77757@edtnps89>
Source record: 1917

On Fri, 12 Aug 2005 22:50:43 +0000, Tom wrote:

> Details about Project Moonray

Very cool!

73 de Mike VE6HMG

354. Re: Repeater On The Moon?

Newsgroup: rec.radio.amateur.space
Date: 2005-08-16 14:28:21 UTC
From: joey <joey@antennaman.com>
Message-ID: <4301F803.ABE013A4@antennaman.com>
Source record: 1918

Ah, reminds me of SNAP 27,
the Plutonium power generator
that was used on the surface of
the moon for the experiments
and telemetry systems that were
left behind !

Nick planned to build a thermonuclear powered (50 WATT DC output) Plutonium
235 fueled unit with a half-life of 97 years.

355. WSR-226 AMSAT Weekly Satellite Status Report

Newsgroup: rec.radio.amateur.space
Date: 2005-08-17 23:23:15 UTC
From: JoAnne Maenpaa <wb9jej_no-spam@earthlink.net>
Message-ID: <DFPMe.8586$ns.211@newsread1.news.atl.earthlink.net>
Source record: 1919

```
This report is organized into 4 parts.
Part 1 - operational analog amateur satellites.
Part 2 - operational digital amateur satellites.
Part 3 - non - operational satellites
Part 4 - proposed satellites

SB SAT @ AMSAT <KB9MMC $ANS-226.S1
WSR 226 Part 1 08/14/2005

AMSAT NEWS SERVICE BULLETIN 226.S1 FROM AMSAT HQ
SILVER SPRING, MD, AUGUST 14, 2005
TO ALL RADIO AMATEURS
BID: $ANS-226.S1

VO-52 HAMSAT
Catalog Number: 28650
Launch Date: May 05,2005

Status: On orbit
Current Mode: U/V

Proposed frequencies:
-------------------
Indian transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacom : 145.940MHz continue carier signal

Dutch transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacon : 145.860MHz 12WPM with CW message
[07242005]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - OFF
FM REPEATER - V/U HIGH POWER

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
Analog voice uplink: 145.880 MHZ FM
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone
```

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

Current scheduled operating modes:

15 Aug
FM Repeater, V/S
Uplink: 145.920 mhz FM, 67hz PL Tone
Downlink 2401.200 mhz FM

22 Aug
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital

[ANS-WSR thanks Mike, KE4AZN for the above information]
[07312005]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz (67.0 Hz PL tone) (See below for operating
procedures)
Downlink: 436.795 MHz

There have been unconfirmed reports on the amsat-bb remailer that SO-50 has
shifted downlink frequency as much as 5khz up. This both from Europe.

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The
order of operation is thus: (allow for Doppler as necessary)

1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm
the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT
the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window
will reset the 10 minute timer.
[09122004]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplink: 145.850 145.870 145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

John, N4QWL reports on July 16th, 2005:

Last evening I had a AOS to LOS qso with WI2W. FO-29 came up at 01:17z here in FM07 and I found WI2W and we chatted until 01:33z. The satellite was at 2 degrees elevation when I finally heard him start to crackle a bit. What a great QSO! To think that I watched this bird launch back in 1996 and it is still working so well is a real thrill. I believe I still have the video. I might just look for it and watch it again. Boy do I love this satellite stuff! Look for you all up there.

Please send the reception reports to lab2 'at' jarl.or.jp.
Please use the subject line: 'FO-29 reception report'.

Mineo, JE9PEL, has an FO-29 satellite telemetry analysis program that will automatically analyze all digital telemetry from the satellite (such as current, voltage and temperature). FO29CWTE is available at:
http://www.ne.jp/asahi/hamradio/je9pel/
[ANS-WSR wishes to thanks John, N4QWL for this week's report]
[07172005]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

The latest information on AO-27 from control operator Michael Wyrick, N3UC (former N4USI), can be found at:
http://www.ao27.org

An AO-27 question-and-answer page is available on the AMSAT-NA web site, with updates by Ray, W2RS. The URL is:
http://www.amsat.org/amsat/intro/ao27faq.html

[ANS-WSR thanks John, K6YK, for this week's AO-27 report]
[08292004]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530

Launch Date: November 15, 1974

Status: Semi-operational in sunlight.
Return to active status: June 21,2002

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A
145.975 to 145.925 MHz CW/USB Mode B
Beacon: 29.502 MHz, 145.972 MHz, 435.1 MHz, 2304.1 MHz

Emily, W0EEC has created a website to allow the users of AO-7 to record
contacts, observations and use of the satellite more effectively at:
http://www.emilyshouse.com/experthams/ao7/main.php
This includes the ability to log contacts.

Tim, K3TZ has written a program to decode AO-07 telemetry.
The program can be downloaded at:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

For more AO-7 info:
http://www.amsat.org/amsat/sats/n7hpr/ao7.html
[11142004]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: U/V CROSS-BAND REPEATER
Digipeater: Inactive

The current Expedition 11 crew is:
Commander Sergei Krikalev
Flight Engineer John Phillips

Worldwide packet uplink: 145.990 MHz FM
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM
Doppler Shift is 10 KHz

Russian callsigns: RS0ISS, RZ3DZR
USA callsign: NA1SS
Packet station mailbox callsign: RS0ISS-11
Packet station keyboard callsign: RS0ISS-3
Digipeater callsign: ARISS

This off the ARISS webpage:
http://www.rac.ca/ariss/oindex.htm#New%20ARISS%20Operations :
The ARISS program is pleased to announce that the amateur radio equipment

aboard the International Space Station is now operating in cross-band repeat mode. We realize that many of you will miss the packet-operating mode. However, cross-band repeat allows further experimentation of the ISS amateur radio system

The downlink for this operating mode remains the same, so listen for the station on 145.80 MHz. The new uplink frequency is 437.80 MHz. All frequencies
are subject to Doppler shifting. For further information on working satellites
and adjusting for Doppler shift, please review Emily Clark's (W0EEC) excellent
presentation on AMSAT's website:
http://www.amsat.org/amsat-new/information/faqs/Intro_sats.pdf

The ISS daily crew schedule can be found at:
http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is NOT
translated from Russian and posted.

More information is available at:
http://www.rac.ca/ariss
http://spaceflight.nasa.gov/station/reference/radio/
http://www.marexmg.org/fileshtml/unprotopage.html
http://www.issfanclub.com
http://oscar.dcarr.org/
[07242005]
NNNN
/EX

SB SAT @ AMSAT <KB9MMC $ANS-226.S2
WSR 226 Part 2 08/14/2005

AMSAT NEWS SERVICE BULLETIN 226.S2 FROM AMSAT HQ
SILVER SPRING, MD, AUGUST 14, 2005
TO ALL RADIO AMATEURS
BID: $ANS-226.S2

PCSAT2 ?0-??
Catalog Number:
Launch Date: August 1, 2005

Status: Operational

PCSAT2 was installed on the exterior of the International Space Station and was activated on August 3, 2005.

PCSAT2 CAPABILITIES: PCSAT2 is attached to the ISS and so its operations must be in cooperation with the ARISS communications suite to minimize any mutual interference and to coordinate activities. Here are the capabilities of the PCSAT2 and ARISS payloads:

PCSAT SYSTEM A:

435.275 PCSAT2 DOWNLINK 1200 baud packet with uplink on 145.825
435.275 PCSAT2 DOWNLINK Occasional user PSK-31 continuous downlink
145.825 PCSAT2 DOWNLINK 1200 baud packet
PCSAT SYSTEM B:

437.975 PCSAT2 DOWNLINK periodic Solar Cell data and PCSAT2 telemetry at
9600 baud
437.975 PCSAT2 DOWNLINK TNC-B command downlink at 1200 baud
437.975 PCSAT2 DOWNLINK User Voice Repeater with VHF uplink
437.975 PCSAT2 DOWNLINK Packet digipeater with VHF uplink

It looks like PCSAT2 can best contribute at this time by operating in
PSK-31 mode for the near future. This is a very exciting new transponder
mode which solves the congestion problem on FM repeaters by letting
multiple stations all communicate at the same time.

PSK-31 users are welcome to try out the new PCSAT2 PSK-31 transponder
on ISS with an uplink on 29.402 +/- 1 KHz and downlink on 435.275 +/-
Doppler using FM.

The FM downlink lets everyone operate full duplex and everyone to see
the same view of the passband as everyone else. THus you can see exactly
what your signal looks like to everyone else.

Help Wanted: PCSat2 PSK-31 Operations Coordinator Needed

To save power and to avoid any potential interferece to any ISS
School contacts, the PSK-31 transponder is only on when a responsible
PC2PSK control station in the ISS/PCSat2 footprint turns it on.

If you are interested in PSK-31 operations and want to volunteer to
coordinate all the other operators and operations, then we have a job
for you. This PSK-31 operations coordinator, who has become fully familiar
with ARISS operations, can next start to organize the pass-by-pass
PSK-31 control ops.

Contact Bob Bruninga, WB4APR, at wb4apr@amsat.org if you wish to
volunteer as the PCSat2 PSK-31 coordinator. Until the PCSat2 team
is able to introduce the new coordinator please do not volunteer as a
pass control operator.

Refer to this page:

http://www.ew.usna.edu/~bruninga/pec/pc2ops.html

For information about the PCSat2 PSK-31 transponder and a diagram
showing a basic configuration for PSK-31 earth stations.

Update August 14, 2005

The PCSat2 team sends a, "Thank You!", to all of the AMSAT and APRS
stations feeding science and telemetry data from 437.975 to the APRS-IS.
This data feeds the live telemetry page and lets everyone see how the

spacecraft is doing around the world: http://www.pcsat2.info

We do, of course, need more stations feeding telemetry, especially from those stations in unusual footprints such as Hawaii and remote areas of the USA, Europe and downunder. More stations capable of receiving and forwarding 9600 baud data would be especially helpful.

The PCSat2 telemetry team plans to write-up a set of turn-key instructions on how to set up a satgate so that others not familiar with APRS can easily join this satgate network. In the interim, stations that wish to experiment and learn can begin using any version of APRS or download the stand-alone ALOGGER 2.02 program from

http://www.billdiaz.dynip.com/.

To set up a satgate, just tune a radio and TNC to one of these channels:

437.975 9600 bd for PCSAT2 data
437.975 1200 bd for PCSAT2 telemetry
145.800 for ARISS packet data
145.825 for the original PCsat

You will need to run your favorite APRS software and connect to satgate.aprsca.net:10150. ALOGGER, mentioned previously now has serial port support for a TNC as a satgate monitoring station.

For the overall PCSAT2 Operations system, see
http://www.ew.usna.edu/~bruninga/pec/pc2ops.html

An on-line overview of PCSAT2 telemetry can be found at:
http://www.pcsat2.info

1200 baud telemetry is just an occasional packet every 10 or 60 seconds. 1200 baud stations can simply feed their downlinks directly into the global APRS system like normal. These will help update the LIVE PCSAT2 telemetry page by G4DPZ at:
http://www.pcsat2.info/PCSat2Web/RealTime.jsp

Packets seen from PCSAT2 can be reviewed at:
http://www.findu.com/cgi-bin/pcsat2.cgi

A screen shot of both the 9600 bps and 1200 bps decoded data as seen by Simon, 9W2QC, can be seen at:
http://www.9w2qc.net/pcsat2/

More information on PCSAT2 can be found at:
http://web.usna.navy.mil/~bruninga/pcsat2.html

[ANS-WSR thanks Bob, WB4APR and the U.S. Naval Academy Satellite Lab for the aboveinformation.]

[08142005}
=====
AO-51 ECHO
Catalog number: 28375

Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - OFF
FM REPEATER - V/U HIGH POWER

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
Analog voice uplink: 145.880 MHz FM
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

Current scheduled operating modes:

15 Aug
FM Repeater, V/S
Uplink: 145.920 mhz FM, 67hz PL Tone
Downlink 2401.200 mhz FM

22 Aug
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital

[ANS-WSR thanks Mike, KE4AZN for the above information]
[07312005]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Non-Operational?????

Uplink/downlink: 145.827 MHz 1200 baud AX.25 AFSK via W3ADO-1
Aux/Uplink: 435.250 MHz 9600 baud via PCSAT-2 (off)
APRS Downlink: 144.390 MHz (Region 2)

PCSat is a 1200-baud APRS digipeater designed for use by stations using
hand-held or mobile transceivers. Downlinks feed a central web site at:
http://pcsat.aprs.org

The APRS-equipped PCSat was built by midshipmen from the U.S. Naval Academy
under the guidance of Bob Bruninga, WB4APR.

[07242005]
=====
CUTE-1
Catalog number: 27844
Launched: June 30,2003

Status: Operational

Uplink: ?
Downlink: 436.8375 CW
437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)
Cliff, K7RR reports:
In the latest Weekly Satellite Report, CUTE 1, #27844 is listed as
OPERATIONAL?
Indeed it is very operational as a CUBESAT sending CW telemetry on
436.8345 MHz. At the July 7 2005, 23:45:20 pass over the Western USA:
CUTE 1 6B A4 xx 7F D7 66A8 4702 FF FF7C 65
CUTE 1 6C A6 59 80 D9 66A8 4702 FF FE7C B6

The June 30th KEPS were within ten seconds of AOS and LOS. It is an very
good object to practice tracking as the orbit and transmitter power are
similar to proposed CUBESATS awaiting launch this December. As a check for
Doppler correction, the lack of change in tone is an excellent indicator.

CUTE 1 is a Japanese (Tokyo Institute of Technology) one kilogram
nanosatellite that was launched by a Rokot rocket from Plesetsk at
14:15 UT on 30 June 2003. It carries a 100 mW beacon at 436.8375 MHz.
Initial orbital parameters were period 101.4 min, apogee 831 km, perigee
819 km, and inclination 98.7?.

For further info about CUTE-1 goto:
http://lss.mes.titech.ac.jp/ssp/cubesat/operation/Schedule_e.html

[ANS WSR wishes to thank Cliff, K7RR, for this week's information]
[07242005]
=====
GO-32 TECHSAT-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
(435.325 n/a - temperature problems)
Uplinks: 145.850, 145.890, 145.930 FM
1269.700, 1269.800, 1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[03132005]
=====

MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink: 145.850 or 145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz
Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[05152005]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for
APRS users.

Uplink: 145.90 145.92 145.94 145.96 MHz FM
(using 1200-baud Manchester FSK)
Downlink: 437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon: 2401.1428 MHz
Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

A WOD collection of current graphics along with general information
and telemetry samples can be found at:
http://www.telecable.es/personales/ea1bcu
[05092004]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational?

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK).
approx. 10 days ON, 10 days OFF
Mode-S Beacon: 2401.500 MHz. ... OFF
UHFBeacon: 435.025 MHz. ... OFF

Clive Wallis wrote, "Very many thanks for all the recent reports of
OSCAR-11, on AMSAT-BB and by direct e-mails. I received the good news,
on Saturday morning, while at the AMSAT-UK Colloquium. This was entirely

unexpected!

When I returned home on Sunday, I heard the passes at 17:21 & 19:02 UTC, and have heard many others since.

Signals seem to be weaker than usual. However,since I last heard the satellite on 30 April, I've reinstalled my antennas , which makes comparisons difficult.

All the analogue telemetry channels, 0 to 59 are zero, ie they have failed. The status channels 60 to 67 are still working. One bit in channel 62, DSR mode, has changed from WRITE to READ. DSR is the Digital Store & Readout experiment. This could be significant if the experiment is still drawing current, but the other status bit indicates thet it is switched OFF.

The on-board clock is now showing a very large error. It has lost approximately 15 days since 30 April. I'll be monitoring the clock closely to see whether it changes at a constant rate, in future passes.

Eclipses should end around mid August. That should help the satellite to continue transmitting.

If the watchdog timer is still working, the satellite should switch OFF in the next 10 to 20 days. I would appreciate if listeners could just make a note of the DATE & UTC time when they hear the satellite, so that when it switches OFF we can determine when it was last heard. Please post your reports to AMSAT-BB or e-mail me direct g3cwv@amsat.org, but NOT until it switches OFF!

[ANS-WSR thanks Clive, G3CWV, for the above information]

More information on UO-11 OSCAR-11 can be found at:
http://www.users.zetnet.co.uk/clivew/

MPEG3 files can be found here at Mineo, JE9PEL website:
http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm

[08072005]
NNNN
/EX

SB SAT @ AMSAT <KB9MMC $ANS-226.S3
WSR 226 Part 3 08/14/2005

AMSAT NEWS SERVICE BULLETIN 226.S3 FROM AMSAT HQ
SILVER SPRING, MD, AUGUST 14, 2005
TO ALL RADIO AMATEURS
BID: $ANS-226.S3

THE FOLLOWING ARE IN ORBIT BUT ARE
NON-OPERATIONAL AT THIS TIME:

POSAT-1 PO-28
Catalog Number: 22829

Launched : September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 435.250 MHz
435.275 MHz

Uplink: 145.925 MHz
145.975 MHz

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

PO-28 (POSAT-1), Portugal's first satellite, launched 12 years ago, will be turned over to Amateur Radio use in the very near future. That was the word July 30 from AMSAT-UK Secretary Jim Heck, G3WGM, during the AMSAT-UK International Space Colloquium in Guildford, England.

Launched September 25, 1993, the satellite operated as a packet store-and-forward BBS (9600 baud FM FSK) on Amateur Radio frequencies for several weeks in early 1994. Over the years, PO-28's primary usage has been commercial, although plans have called for eventually shifting its operation to ham radio use. G3WGM reports that following lengthy negotiations it has been agreed that the satellite can be switched permanently to amateur frequencies. The changeover is expected to take a couple of weeks.

The Portuguese satellite was built at the University of Surrey as part of a collaborative satellite technology program that involved industry and academe. Uplink frequencies will be 145.925 and 145.975 MHz. Downlink frequencies will be 435.250 and 435.275 MHz. More information on PO-28 is on the AMSAT Web site http://www.amsat.org/amsat/sats/n7hpr/po28.html.

Uplink Frequencies: 145.925 and 145.975 MHz
Downlink Frequencies: 435.250 and 435.275 MHz

Orbit: 822 x 800 km, 98.6 deg inclined, sun-synchronous.

Transponder capabilities include FM repeater and 38k4 data. If you want to hear how loud this satellite is, listen on 429.950 until the change back to amateur radio service.

Keplerian elements for PO-28 are not currently contained in the AMSAT keps bulletins, but can be found at Celestrak in amateur.txt using the name "POSAT". Users of Space Track should query the NORAD Satellite ID number 22829. The name listed by Space Track is "EYESAT A".

More information of POSAT-1 can be found at:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
http://www.amsat.org/amsat/sats/n7hpr/po28.html
[ANS-WSR wishes to thanks Trevor, M5AKA and Jim, G3WGM, for this week's information.]
[08072005]
=====
AO-10 OSCAR 10

Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon: 145.810 MHz (unmodulated carrier)

AO-10 has been locked into a Mode-B, 70-cm uplink and
2-meter downlink for several years.

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Non-operational

Uplink: 145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink: 435.812 MHz SSB
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Alberto E. Zagni - I2KBD reports on 02/13/05
The spacecraft is in MBL (safe mode) and is trasmitting just 6 channels
of telemetry. Temperatures and voltage are nominal, but there seems to
be a problem with the onboard receiver, refusing to accept commands.
The spacecraft was launched in 1993, thus nearing 12 years in orbit...

Best regards
Alberto E. Zagni - I2KBD
ITAMSAT Mission Director

More information of IO-26 can be found at:

http://joshua.micronet.it/english/itamsat/itamsathome.html
http://www.amsat.org/amsat/sats/n7hpr/io26.html
www.itamsat.org

[02132005]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB
Beacon: 145.860 MHz
Robot: 145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB
Beacon: 29.352 MHz (intermittent)
SSB meeting frequency: 29.380 MHz (unofficial)

John, KD6PAG reports on June 16, 2004 to ANS:
RS-15 beacon seemed to be back in the mode where it's a tone about 5 seconds
off and then 5 seconds on this morning.

ANS is looking for more confirmations of RS-15 coming back.

[ANS thanks John, KD6PAG for RS-15 information]
[06202004]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplink: 145.84 145.86 145.88 145.90 MHz FM
(using 1200-baud Manchester FSK)
CW downlink: 437.125 MHz
Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)
Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM
Broadcast Callsign: HLO1-11
BBS: HLO1-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a
non-operational status.
[05092004]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM (9600-baud FSK)
Downlink: 436.500 MHz FM
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink frequency (listed on the PanSat web site) 436.500 MHz

The satellite is not available for general uplink transmissions.

The Naval Postgraduate School developed PanSat. At the time of
launch, PanSat spread-spectrum digital transponders were to
be available to Amateur Radio operators along with software to utilize
this technology.

The satellite is still operating, however, the spread spectrum packet
radio portion never took place. The spacecraft is now beyond it's
initial 2-year mission life, but telemetry records are still being
downloaded.

For more information, visit the official PanSat web site at:
http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS has no further information]
[05232004]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlink: 437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA
web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplink V-band 145.840 - 145.990 MHz CW/LSB
U-band 435.550 - 435.800 MHz CW/LSB
L1-band 1269.250 - 1269.500 MHz CW/LSB
L2-band 1268.325 - 1268.575 MHz CW/LSB
S1-band 2400.350 - 2400.600 MHz CW/LSB
Downlink: S2-band 2401.225 - 2401.475 MHz CW/USB
K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon: 2401.323, 24,048.035
[05232004]

SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational
Downlink: 437.075 MHz
Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545

Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz
Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
callsign KE6QMD, as per the user service agreement located at the following
URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Semi-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

AO-49 (SAFIR-M) is a German amateur radio payload onboard the small German
scientific satellite "RUBIN-2".

AO-49 was built by the German amateur radio association "AATiS
e.V." (German
acronym for "Arbeitskreis Amateurfunk und Telekommunikation in der Schule",
which means: 'working group for amateur radio anand telecommunications in
schools'). AO-49 is designed as a "store and broadcast" system for APRS
based messages, dedicated for the use of schools in combination with the
existing WX-Net and planned buoy experiments in Germany.

No transmissions detected since the 1st of February 2003! It appears
AO-49 is not properly aligned to illuminate the solar panels. This
should end soon. Due to its orbit, AO-49 will be in a phase without

eclipses until 13Feb03.

Martin DG8UAU has written a small software program "SAFIR-M Decoder" to allow decoding of the received DATA0 frames. It is available at: http://amend.gmxhome.de in the section Aktuelles.

Details on AO-49 (SAFIR-M) can be found at:
http://amend.gmxhome.de

Information about AATiS e.V. is available at:
http://www.aatis.de
[05092004]
NNNN
/EX

SB SAT @ AMSAT <KB9MMC $ANS-226.S4
WSR 226 Part 4 08/14/2005

AMSAT NEWS SERVICE BULLETIN 226.S4 FROM AMSAT HQ
SILVER SPRING, MD, AUGUST 14,2005
TO ALL RADIO AMATEURS
BID: $ANS-226.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE
PROPOSED FOR LAUNCH AT THIS TIME:

UCISAT ?O-??
Catalog number:
Proposed Launch Date: October 31, 2005

Status: Under Construction

Downlink: Submission in Progress
Uplink: Submission in Progress
Callsign: Submission in Progress

This from Matt Bennett, KF6RTB, UCISAT Communications Team Member:

Our website is www.ucisat.net .This is a new website, however, and doesn't have the "Status" section active yet. Because of the growing interest in our project, I'll push our webmaster to create updates (hopefully) on a week-to-week basis. For now, the current status of the mission is as follows:

-Expected Launch Date: October 31st, 2005
-Frequency Allocation: Submission in Progress
-Construction Status: Sub-Assembly
[WSR to thank Matt Bennett, KF6RTB, for this week's report.]
[01302005]
=====
SSETI ?O-??
Catalog Number:
Proposed Launch Date: LATE 2005

Status: AWAITING LAUNCH

Graham, G3VZV reports:
We have now been advised that the revised launch date for SSETI Express and the other satellites on the DMC3 COSMOS launch has been confirmed as September
27th - so please keep those fingers crossed!

SpaceDaily has a report about SSETI at:
http://www.spacedaily.com/news/internet-04zzzu.html

You can find more info about SSETI at:
http://sseti.gte.tuwien.ac.at/WSW4/

Looking at the website for the SSETI Express webcam
http://sseti.gte.tuwien.ac.at/WSW4/webcam.htm

[ANS thanks Graham, G3VZV for the above information]
[07312005]
=====
PHASE 3E ?O-??
Catalog Number:
Proposed Launch Date: Early 2006

Status: Under Construction

William Leijenaar, PE1RAH reports on July 16th, 2005:

Hi AMSATs,

I always like to inform the AMSATs public about my P3e work, but unfortunatly due to
some reasons there was not much time and nothing much to say...

However, now I am happy to announce that the my MODE-UV transponder design for P3e is ready at the P3e integration place in Marburg (Germany). About 4 weeks ago I was in Marburg before, where the transponder has been checked. Unfortunatly some unsure things were found in the design. The unsure things were about long term stability after many years in space.

At home in The Netherlands, I changed the design with some minor changes to have a secure long term stability. Finally I tested the transponder again and it performed well within the specifications. Again something learned for future transponder designs :o)

Last Wednesday I drove to AMSAT-DL P3e integrations place in Marburg again, and have my transponder again checked. In the beginning it seemed that the 70cm receiver lost 10dB in sensetivity. After some more measurements we find out that it was due to a bad attenuator we used for protection at the input.

Together with Karl Meinzer we looked for any problems, but so far we could see (without HELAPS) all was okay. In the afternoon I went back home again, this time without the MODE-UV.

Now the MODE-UV will get a new home, the home of P3e... :o)
I hope the transponder will work like its elder sister in AO-10, and you all will enjoy it for many years...

It was lots of work to get it this far, but I know it is for a good
purpose...

For the latest project status update please visit the AMSAT-DL
P3-E web page:
http://www.amsat-dl.org/p3e/

[ANS-WSR wishes to thank William Leijenaar, PE1RAH for this week's report]
[07172005]
=====
CP1 ?o-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N6CP
Proposed Transmit Frequency: 436.845
[03272005]
=====
CP2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.325
[03272005]
=====
HAUSAT1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: D90HP
Proposed Transmit Frequency: 437.465
[03272005]
=====
ICE Cube 1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: W2CXM
Proposed Transmit Frequency: 437.305
[03272005]
=====
ICE Cube 2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N2VR
Proposed Transmit Frequency: 437.425
[03272005]
=====
ION ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.505
[03272005]
=====
KUTEsat ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: KC0RMW
Proposed Transmit Frequency: 437.385
[03272005]
=====
MEROPE ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: K7MSU-1
Proposed Transmit Frequency: 145.980
[03272005]
=====
nCUBE1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
2407.25
[03272005]
=====
RINCON ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
437.345
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]

=====
SEEDS ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: JQ1YGU
Proposed Transmit Frequency: 437.485
[03272005]
=====
Mea Huaka ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.405
[03272005]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors

to AMSAT Project Funds, will be eligible to receive additional benefits.
Application forms are available from the AMSAT-NA Office.

This week's Weekly Satelite Report Editor is James K. Darrow, KB9MMC.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the
memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen,
G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

Via the ans mailing list at AMSAT.ORG courtesy of AMSAT-NA.
To unsubscribe, send "unsubscribe ans" to Majordomo@amsat.org

356. ANS-233 AMSAT Weekly News Bulletin

Newsgroup: rec.radio.amateur.space
Date: 2005-08-22 12:32:51 UTC
From: JoAnne Maenpaa <wb9jej_no-spam@earthlink.net>
Message-ID: <TBjOe.24$9i4.1@newsread2.news.atl.earthlink.net>
Source record: 1920

AMSAT NEWS SERVICE
ANS-233

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

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ans-editor@amsat.org

In this edition:

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SB SAT @ AMSAT $ANS-233.01
AMSAT Symposium Reminder

AMSAT News Service Bulletin 233.01
From AMSAT HQ SILVER SPRING, MD.
August 21, 2005
To All RADIO AMATEURS
BID: $ANS-233.01

Space! Ham radio goes there and you can join in the fun! Come to the AMSAT Technical Symposium and Annual Meeting this fall in lovely Lafayette, Louisiana. Education and technical sessions begin on Friday, the 7th of October. Technical, Field Ops, and the IARU forum follow through Sunday the 9th of October. Enjoy the best of Acadian Louisiana with Friday's "Shrimp Boil," Saturday's Banquet with great prizes, and Sunday's "Swamp Tour."

This year represents the first time that you can register for the Symposium online! To get the $10 early registration discount, registrations must be received by 15 September 2005. For more, see: http://www.amsat.org/amsat-new/symposium/.

[ANS thanks the AMSAT Symposium team for the above information]

/EX

SB SAT @ AMSAT $ANS-233.02
AMSAT Symposium Agenda

AMSAT News Service Bulletin 233.02
From AMSAT HQ SILVER SPRING, MD.
August 21, 2005
To All RADIO AMATEURS
BID: $ANS-233.02

Thursday, 6 October 2005
8 am-Noon AMSAT Board Meeting
Noon-1 pm Lunch Break
1 pm-5 pm AMSAT Board Meeting
5 pm-6 pm Dinner Break
6 pm-9 pm AMSAT Board Meeting

Friday, 7 October 2005
8 am-Noon AMSAT Board Meeting
1 pm-5 pm AMSAT Symposium
5:30 pm Shrimp boil
7:30 pm President's Club Meeting

Saturday, 8 October 2005
8 am-noon AMSAT Symposium
Noon-1 pm Lunch on own
1 pm-1:30 pm Awards Ceremony
1:30-4 pm AMSAT Symposium
4 pm-5 pm AMSAT Annual Meeting
7-7:30 pm Attitude Adjustment
7:30-10 PM Banquet

Sunday, 9 October 2005
7 am-8:30 am Area Coordinators Breakfast
7:30 am First Swamp Tour
9:30 am Second Swamp Tour
11:00 am IARU Meeting

[ANS thanks the AMSAT Symposium team for the above information]

/EX

SB SAT @ AMSAT $ANS-233.03
AMSAT Election Deadline Approaching

AMSAT News Service Bulletin 233.03
From AMSAT HQ SILVER SPRING, MD.
August 21, 2005
To All RADIO AMATEURS
BID: $ANS-233.03

With the deadline for the receipt of ballots for the AMSAT Board of
Directors less than a month away, Bill Hook, W3QBC, who heads up AMSAT's
Ballot Counting Committee, advises that to date only 609 ballots have

been received. This amounts to only 15% of the total number of ballots mailed to members.

Votes are needed to select the 4 best qualified to serve among the 8 candidates. The biographical information as submitted by the Candidates can be found on the AMSAT website at http://www.amsat.org/amsat-new/AboutAmsat/candidate_bios.php

To be counted, ballots must be received at the AMSAT office before the close of business on Thursday, 15 September 2005.

[ANS thanks Bill W3QBC for the above information]

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SB SAT @ AMSAT $ANS-233.04
Software Defined Transponder Prototype On-the-Air

AMSAT News Service Bulletin 233.04
From AMSAT HQ SILVER SPRING, MD.
August 21, 2005
To All RADIO AMATEURS
BID: $ANS-233.04

At the labs of CNS Systems, Inc. in Md. (W2GPS business), W2GPS, W3IWI, and N4HY made the first on-the-air tests using a prototype software defined transponder on 16 August 2005. A sucessful three way QSO was conducted in a 45 Khz wide transponder. An audio clip of this first QSO is available at ftp://ftp.cnssys.com/pub/amsat/Eagle_SDT_1st_Contact.mp3

At the AMSAT Symposium in Louisiana, the plan is to have both the Mode B and the Mode A transponder fully functional and usable by all. We will show the power of using software defined radio for the transponders by having 1/2 of the transponder divided into two or three FM channels and the other half fully linear whilst adding 400bps AMSAT standard beacon in the middle, AND on command, switch it to fully linear, etc.

We will incorporate the Stella AGC algorithms developed by Howard, G6LVB, adapted to our hardware for the demonstration in Lousiana. Expect to be able to conduct SSB, CW, FM, etc. QSO's on Mode A, Mode B and Mode LS if time permits.

[ANS thanks Bob, N4HY for the above information]

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SB SAT @ AMSAT $ANS-233.05
AMSAT Website Technical Review Team Formed

AMSAT News Service Bulletin 233.05
From AMSAT HQ SILVER SPRING, MD.
August 21, 2005
To All RADIO AMATEURS

BID: $ANS-233.05

Barry Baines, WD4ASW, AMSAT's VP-Marketing & User Services is pleased to announce that our Website Technical Review Team, under the leadership of Gould Smith, WA4SXM has been formed. Gould serves as Director-Field Operations and is the author of a number of AMSAT books. He is well qualified to handle this important task with the assistance of a very capable team that he has formed. The team that Gould has developed consists of AA2TX, KO4MA, KQ6EA, N8FGV, and VA3DB.

The team has begun a systematic look at the content of the AMSAT website for technical issues, and is assigning a priority to identified items. The first areas the team is addressing are the Glossary and the Mode J operation article. When appropriate, they will seek input from other individuals who may be knowledgeable in particular areas. Two members of the team will OK articles for technical content with final approval from Gould before he forwards them for inclusion on the website.

"Our team is excited about updating the technical content of our website" says Gould Smith, WA4SXM. "However, this will take some time and will require thoughtful evaluation. In looking at the Glossary for example, we have found through our initial research that even the experts sometimes disagree on proper definition of technical terms. We want the AMSAT website to be a trusted and reliable source."

Emily Clarke, W0EEC serves as Director-Website and will be working closely with Gould to implement changes as they are developed.

Should website visitors wish to suggest areas of current website technical content for the team's consideration or are interested in submitting suggested technical changes or updates, they can do so by contacting Gould Smith, WA4SXM using his AMSAT e-mail alias. Please put 'Website Technical Review' in the subject line. Gould and several members of the team will be attending the AMSAT Symposium in Lafayette, LA (7-9 OCT 2005) and are interested in hearing comments from attendees concerning their thoughts on the updating of technical content of our website.

[ANS thanks Barry, WD4ASW for the above information]

/EX

SB SAT @ AMSAT $ANS-233.06
New AMSAT Video News Released

AMSAT News Service Bulletin 233.06
From AMSAT HQ SILVER SPRING, MD.
August 21, 2005
To All RADIO AMATEURS
BID: $ANS-233.06

AMSAT's Director of Video Services, Don Jacob, has posted a number of new video packages centering around Dayton 2005 & Space Day at the

Smithsonian which are available for stream viewing on the AMSAT Web Site: www.amsat.org

Select the box on the left entitled "AMSAT Video News" and take a look.

Enjoy,
AMSAT Video Department

[ANS thanks Gunther, W8GSM for the above information]

/EX

SB SAT @ AMSAT $ANS-233.07
ARISS Status - 15 August 2005

AMSAT News Service Bulletin 233.07
From AMSAT HQ SILVER SPRING, MD.
August 21, 2005
To All RADIO AMATEURS
BID: $ANS-233.07

1. ARISS Student Pursues Astronaut Career

Stephanie Radcliff was a student at Daviess County High School (DCHS) in Owensboro, Kentucky when the school experienced an ARISS contact on May 31, 2001. She had prepared three questions to ask astronaut Susan Helms, KC7NHZ, that day, including one concerning future space explorations.

Four years later, on August 12, 2005, Stephanie returned to her alma mater to speak to the students there. She is now a graduate of Emory-Riddle University, and holds a degree in the aerospace field. She has taken the first steps toward becoming an astronaut and hopes to be accepted for astronaut training. Harold Wilson, the coordinating teacher of the DCHS - ARISS contact, remarked that it was the ARISS contact which inspired Stephanie to pursue this career choice.

2. PCSAT2/MISSE5 Status

The PCSAT2 PSK-31 transponder was turned on. It uses an uplink on 29.402 +/- 1 KHz and downlink on 435.275 +/- Doppler using FM . For more information, see: http://www.ew.usna.edu/~bruninga/pec/pc2ops.html

3. ARISS International Meeting

ARRL ran a story on the ARISS International face-to-face Meeting held at the University of Surrey. The article, entitled, "ARISS Delegates Urged to Cast Eye on Future of Ham Radio in Space," may be found on their website. See: http://www.arrl.org/news/stories/2005/08/12/106/?nc=1

ARISS delegate Rosalie White is currently working on the minutes of the U.K. meeting. They will be posted on the ARISS and AMSAT websites in the near future.

The next ARISS International Teleconference will be held on Tuesday, 23 August 2005.

4. Australian News Article on Astronaut's Father

The Australian newspaper, The Age, ran a story on Adrian Thomas. Thomas, father of astronaut Andy Thomas, was waiting apprehensively for word of Discovery's landing. A ham friend of his had been listening to NASA's channel, and called to let him know that the shuttle was heading for a safe landing in California. "Ham radio call ends father's anxious wait," may be found at:
http://www.theage.com.au/news/national/ham-radio-call-ends-fathers-anxious-wait/2005/08/10/1123353330011.html

5. Astronaut to Visit ARISS School

Astronaut Leroy Chiao, KE5BRW, plans to visit Fairview Elementary School in Mount Prospect, Illinois. Chiao visited the school in May, 2004, before his space flight, and. he exchanged e-mails and photos with the school, and participated in an ARISS contact with the children on 10 February 2005 during his Expedition 10 increment. The date for his visit has not yet been set, but 7 September 2005 is being considered. Fairview has posted on their website photos of Chiao's first visit, and the audio and questions from the ARISS contact. See:
http://fairview.dist57.org:16080/spacewebsite/fvspacecontact.html

6. Teaching from Space Teleconference Held

A teleconference was held on Thursday, August 10 between ARISS-U.S. members and the Teaching from Space Office at JSC. Education Specialist Jonathan Neubauer will be the point of contact for ARISS and the Education Office. ARISS extends a welcome to Jon!

[ANS thanks Carol, KB3LKI for the above information]

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SB SAT @ AMSAT $ANS-233.08
OSCAR 11 Report - 15 August 2005

AMSAT News Service Bulletin 233.08
From AMSAT HQ SILVER SPRING, MD.
August 21, 2005
To All RADIO AMATEURS
BID: $ANS-233.08

OSCAR-11 REPORT

15 August 2005

OSCAR-11 is back! I received the good news, on Saturday morning, while at the AMSAT-UK Colloquium. This was entirely unexpected! On Sunday morning Bob G4VRC played me a recording of an early morning pass received that day.

During the period 21 July to 14 August 2005 consistent signals have been heard from 30 July to 08 August. Signals seem to be weaker than usual, confirmed by the many reports received. However,since I last heard the

satellite on 30 April, I've reinstalled my antennas , which makes comparisons difficult.

Many thanks for all the recent reports of OSCAR-11 including those from KU7Z (who heard it first), KB2M, VK6XH, HK7MKE, KA2UPW, JE9PEL, G1OCN, HB9SKA and G8OQW.

All the analogue telemetry channels, 0 to 59 are zero, ie they have failed. The status channels 60 to 67 are still working. One bit in channel 62, DSR mode, has changed from WRITE to READ. DSR is the Digital Store & Readout experiment. This could be significant if the experiment is still drawing current, but the other status bit indicates that it is switched OFF.

The on-board clock is now showing a very large error. It has lost approximately 19 days since 30 April. During the recent data collection period, the clock error has been changing at a decreasing rate. The size of the clock error and the rate at which it is changing is similar to the duration of the solar eclipse periods. This suggests that the clock might have been switching OFF during eclipses.

The eclipses have now ended, and the satellite should be in continuous sunlight for the remainder of this year, and well into next year. This should help the satellite to continue transmitting, although continuous sunlight can cause problems due to excessive temperatures.

If the watchdog timer is still operating on a 20 day cycle, ie. approximately ten days ON followed by 10 days OFF, then the VHF beacon should resume transmissions around 18 August.

The Beacon frequencies are -

VHF 145.826 MHz. AFSK FM ASCII Telemetry

UHF 435.025 MHz. OFF

S-band 2401.5 MHz. OFF

Listeners to OSCAR-11 may be interested in visiting my website which contains an archive of news & telemetry data. It also contains details about using a soundcard or hardware demodulators for data capture. There is software for capturing data, and decoding ASCII telemetry. The URL is www.users.zetnet.co.uk/clivew/

If you place this bulletin on a terrestrial packet network, please use the bulletin identifier $BID:U2RPT112.CWV, to prevent duplication.

[ANS thanks Clive, G3CWV for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS
ku4os at amsat dot org

357. WSR-233 AMSAT Weekly Satellite Status Report

Newsgroup: rec.radio.amateur.space
Date: 2005-08-22 12:33:50 UTC
From: JoAnne Maenpaa <wb9jej_no-spam@earthlink.net>
Message-ID: <OCjOe.25$9i4.24@newsread2.news.atl.earthlink.net>
Source record: 1921

This report is organized into 4 parts.
Part 1 - operational analog amateur satellites.
Part 2 - operational digital amateur satellites.
Part 3 - non - operational satellites
Part 4 - proposed satellites

SB SAT @ AMSAT <KB9MMC $ANS-233.S1
WSR 233 Part 1 08/21/2005

AMSAT NEWS SERVICE BULLETIN 233.S1 FROM AMSAT HQ
SILVER SPRING, MD, AUGUST 21, 2005
TO ALL RADIO AMATEURS
BID: $ANS-233.S1

VO-52 HAMSAT
Catalog Number: 28650
Launch Date: May 05,2005

Status: On orbit
Current Mode: U/V

Proposed frequencies:

Indian transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacom : 145.940MHz continue carier signal

Dutch transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacon : 145.860MHz 12WPM with CW message
[07242005]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - OFF
FM REPEATER - V/U HIGH POWER

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
Analog voice uplink: 145.880 MHZ FM
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

Current scheduled operating modes:

22 Aug
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital

[ANS-WSR thanks Mike, KE4AZN for the above information]
[07312005]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz (67.0 Hz PL tone) (See below for operating
procedures)
Downlink: 436.795 MHz

There have been unconfirmed reports on the amsat-bb remailer that SO-50 has
shifted downlink frequency as much as 5khz up. This both from Europe.

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The
order of operation is thus: (allow for Doppler as necessary)

1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm
the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT
the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window
will reset the 10 minute timer.
[09122004]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB

Beacon: 435.795 MHz

Digital Mode JD
Uplink: 145.850 145.870 145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

John, N4QWL reports on July 16th, 2005:

Last evening I had a AOS to LOS qso with WI2W. FO-29 came up at 01:17z here in FM07 and I found WI2W and we chatted until 01:33z. The satellite was at 2 degrees elevation when I finally heard him start to crackle a bit. What a great QSO! To think that I watched this bird launch back in 1996 and it is still working so well is a real thrill. I believe I still have the video. I might just look for it and watch it again. Boy do I love this satellite stuff! Look for you all up there.

Please send the reception reports to lab2 'at' jarl.or.jp.
Please use the subject line: 'FO-29 reception report'.

Mineo, JE9PEL, has an FO-29 satellite telemetry analysis program that will automatically analyze all digital telemetry from the satellite (such as current, voltage and temperature). FO29CWTE is available at:
http://www.ne.jp/asahi/hamradio/je9pel/
[ANS-WSR wishes to thanks John, N4QWL for this week's report]
[07172005]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

The latest information on AO-27 from control operator Michael Wyrick, N3UC (former N4USI), can be found at:
http://www.ao27.org

An AO-27 question-and-answer page is available on the AMSAT-NA web site, with updates by Ray, W2RS. The URL is:
http://www.amsat.org/amsat/intro/ao27faq.html

[ANS-WSR thanks John, K6YK, for this week's AO-27 report]
[08292004]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Semi-operational in sunlight.
Return to active status: June 21,2002

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A
145.975 to 145.925 MHz CW/USB Mode B
Beacon: 29.502 MHz, 145.972 MHz, 435.1 MHz, 2304.1 MHz

Emily, W0EEC has created a website to allow the users of AO-7 to record
contacts, observations and use of the satellite more effectively at:
http://www.emilyshouse.com/experthams/ao7/main.php
This includes the ability to log contacts.

Tim, K3TZ has written a program to decode AO-07 telemetry.
The program can be downloaded at:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

For more AO-7 info:
http://www.amsat.org/amsat/sats/n7hpr/ao7.html
[11142004]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: U/V CROSS-BAND REPEATER
Digipeater: Inactive

The current Expedition 11 crew is:
Commander Sergei Krikalev
Flight Engineer John Phillips

Worldwide packet uplink: 145.990 MHz FM
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM
Doppler Shift is 10 KHz

Russian callsigns: RS0ISS, RZ3DZR
USA callsign: NA1SS
Packet station mailbox callsign: RS0ISS-11
Packet station keyboard callsign: RS0ISS-3
Digipeater callsign: ARISS

This off the ARISS webpage:
http://www.rac.ca/ariss/oindex.htm#New%20ARISS%20Operations :
The ARISS program is pleased to announce that the amateur radio equipment
aboard the International Space Station is now operating in cross-band repeat
mode. We realize that many of you will miss the packet-operating mode. How-
ever, cross-band repeat allows further experimentation of the ISS amateur
radio system

The downlink for this operating mode remains the same, so listen for the station on 145.80 MHz. The new uplink frequency is 437.80 MHz. All frequencies
are subject to Doppler shifting. For further information on working satellites
and adjusting for Doppler shift, please review Emily Clark's (W0EEC) excellent
presentation on AMSAT's website:
http://www.amsat.org/amsat-new/information/faqs/Intro_sats.pdf

The ISS daily crew schedule can be found at:
http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is NOT
translated from Russian and posted.

More information is available at:
http://www.rac.ca/ariss
http://spaceflight.nasa.gov/station/reference/radio/
http://www.marexmg.org/fileshtml/unprotopage.html
http://www.issfanclub.com
http://oscar.dcarr.org/
[07242005]
NNNN
/EX

SB SAT @ AMSAT <KB9MMC $ANS-233.S2
WSR 233 Part 2 08/21/2005

AMSAT NEWS SERVICE BULLETIN 233.S2 FROM AMSAT HQ
SILVER SPRING, MD, AUGUST 21, 2005
TO ALL RADIO AMATEURS
BID: $ANS-233.S2

PCSAT2 ?0-??
Catalog Number:
Launch Date: August 1, 2005

Status: Operational

PCSAT2 was installed on the exterior of the International Space Station and was activated on August 3, 2005.

PCSAT2 CAPABILITIES: PCSAT2 is attached to the ISS and so its operations must be in cooperation with the ARISS communications suite to minimize any mutual interference and to coordinate activities. Here are the capabilities of the PCSAT2 and ARISS payloads:

PCSAT SYSTEM A:

435.275 PCSAT2 DOWNLINK 1200 baud packet with uplink on 145.825
435.275 PCSAT2 DOWNLINK Occasional user PSK-31 continuous downlink
145.825 PCSAT2 DOWNLINK 1200 baud packet
PCSAT SYSTEM B:

437.975 PCSAT2 DOWNLINK periodic Solar Cell data and PCSAT2 telemetry at 9600 baud
437.975 PCSAT2 DOWNLINK TNC-B command downlink at 1200 baud
437.975 PCSAT2 DOWNLINK User Voice Repeater with VHF uplink
437.975 PCSAT2 DOWNLINK Packet digipeater with VHF uplink

It looks like PCSAT2 can best contribute at this time by operating in PSK-31 mode for the near future. This is a very exciting new transponder mode which solves the congestion problem on FM repeaters by letting multiple stations all communicate at the same time.

PSK-31 users are welcome to try out the new PCSAT2 PSK-31 transponder on ISS with an uplink on 29.402 +/- 1 KHz and downlink on 435.275 +/- Doppler using FM.

The FM downlink lets everyone operate full duplex and everyone to see the same view of the passband as everyone else. THus you can see exactly what your signal looks like to everyone else.

Help Wanted: PCSat2 PSK-31 Operations Coordinator Needed

To save power and to avoid any potential interferece to any ISS School contacts, the PSK-31 transponder is only on when a responsible PC2PSK control station in the ISS/PCSat2 footprint turns it on.

If you are interested in PSK-31 operations and want to volunteer to coordinate all the other operators and operations, then we have a job for you. This PSK-31 operations coordinator, who has become fully familiar with ARISS operations, can next start to organize the pass-by-pass PSK-31 control ops.

Contact Bob Bruninga, WB4APR, at wb4apr@amsat.org if you wish to volunteer as the PCSat2 PSK-31 coordinator. Until the PCSat2 team is able to introduce the new coordinator please do not volunteer as a pass control operator.

Refer to this page:

http://www.ew.usna.edu/~bruninga/pec/pc2ops.html

For information about the PCSat2 PSK-31 transponder and a diagram showing a basic configuration for PSK-31 earth stations.

Update August 14, 2005

The PCSat2 team sends a, "Thank You!", to all of the AMSAT and APRS stations feeding science and telemetry data from 437.975 to the APRS-IS. This data feeds the live telemetry page and lets everyone see how the spacecraft is doing around the world: http://www.pcsat2.info

We do, of course, need more stations feeding telemetry, especially from those stations in unusual footprints such as Hawaii and remote areas of the USA, Europe and downunder. More stations capable of receiving and forwarding 9600 baud data would be especially helpful.

The PCSat2 telemetry team plans to write-up a set of turn-key instructions on how to set up a satgate so that others not familiar with APRS can easily join this satgate network. In the interim, stations that wish to experiment and learn can begin using any version of APRS or download the stand-alone ALOGGER 2.02 program from

http://www.billdiaz.dynip.com/.

To set up a satgate, just tune a radio and TNC to one of these channels:

437.975 9600 bd for PCSAT2 data
437.975 1200 bd for PCSAT2 telemetry
145.800 for ARISS packet data
145.825 for the original PCsat

You will need to run your favorite APRS software and connect to satgate.aprsca.net:10150. ALOGGER, mentioned previously now has serial port support for a TNC as a satgate monitoring station.

For the overall PCSAT2 Operations system, see
http://www.ew.usna.edu/~bruninga/pec/pc2ops.html

An on-line overview of PCSAT2 telemetry can be found at:
http://www.pcsat2.info

1200 baud telemetry is just an occasional packet every 10 or 60 seconds. 1200 baud stations can simply feed their downlinks directly into the global APRS system like normal. These will help update the LIVE PCSAT2 telemetry page by G4DPZ at:
http://www.pcsat2.info/PCSat2Web/RealTime.jsp

Packets seen from PCSAT2 can be reviewed at:
http://www.findu.com/cgi-bin/pcsat2.cgi

A screen shot of both the 9600 bps and 1200 bps decoded data as seen by Simon, 9W2QC, can be seen at:
http://www.9w2qc.net/pcsat2/

More information on PCSAT2 can be found at:
http://web.usna.navy.mil/~bruninga/pcsat2.html

[ANS-WSR thanks Bob, WB4APR and the U.S. Naval Academy Satellite Lab for the aboveinformation.]

[08142005}
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - OFF
FM REPEATER - V/U HIGH POWER

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM

Analog voice uplink: 145.880 MHz FM
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

Current scheduled operating modes:

22 Aug
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital

[ANS-WSR thanks Mike, KE4AZN for the above information]
[07312005]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Non-Operational?????

Uplink/downlink: 145.827 MHz 1200 baud AX.25 AFSK via W3ADO-1
Aux/Uplink: 435.250 MHz 9600 baud via PCSAT-2 (off)
APRS Downlink: 144.390 MHz (Region 2)

PCSat is a 1200-baud APRS digipeater designed for use by stations using
hand-held or mobile transceivers. Downlinks feed a central web site at:
http://pcsat.aprs.org

The APRS-equipped PCSat was built by midshipmen from the U.S. Naval Academy
under the guidance of Bob Bruninga, WB4APR.
[07242005]
=====
CUTE-1
Catalog number: 27844
Launched: June 30,2003

Status: Operational

Uplink: ?
Downlink: 436.8375 CW
437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)
Cliff, K7RR reports:
In the latest Weekly Satellite Report, CUTE 1, #27844 is listed as

OPERATIONAL?
Indeed it is very operational as a CUBESAT sending CW telemetry on
436.8345 MHz. At the July 7 2005, 23:45:20 pass over the Western USA:
CUTE 1 6B A4 xx 7F D7 66A8 4702 FF FF7C 65
CUTE 1 6C A6 59 80 D9 66A8 4702 FF FE7C B6

The June 30th KEPS were within ten seconds of AOS and LOS. It is an very
good object to practice tracking as the orbit and transmitter power are
similar to proposed CUBESATS awaiting launch this December. As a check for
Doppler correction, the lack of change in tone is an excellent indicator.

CUTE 1 is a Japanese (Tokyo Institute of Technology) one kilogram
nanosatellite that was launched by a Rokot rocket from Plesetsk at
14:15 UT on 30 June 2003. It carries a 100 mW beacon at 436.8375 MHz.
Initial orbital parameters were period 101.4 min, apogee 831 km, perigee
819 km, and inclination 98.7?.

For further info about CUTE-1 goto:
http://lss.mes.titech.ac.jp/ssp/cubesat/operation/Schedule_e.html

[ANS WSR wishes to thank Cliff, K7RR, for this week's information]
[07242005]
=====
GO-32 TECHSAT-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
(435.325 n/a - temperature problems)
Uplinks: 145.850, 145.890, 145.930 FM
1269.700, 1269.800, 1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[03132005]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink: 145.850 or 145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz
Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK

Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[05152005]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for
APRS users.

Uplink: 145.90 145.92 145.94 145.96 MHz FM
(using 1200-baud Manchester FSK)
Downlink: 437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon: 2401.1428 MHz
Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

A WOD collection of current graphics along with general information
and telemetry samples can be found at:
http://www.telecable.es/personales/ea1bcu
[05092004]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational?

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK).
approx. 10 days ON, 10 days OFF
Mode-S Beacon: 2401.500 MHz. ... OFF
UHFBeacon: 435.025 MHz. ... OFF

OSCAR-11 is back! I received the good news, on Saturday morning, while
at the AMSAT-UK Colloquium. This was entirely unexpected! On Sunday
morning Bob G4VRC played me a recording of an early morning pass
received that day.

During the period 21 July to 14 August 2005 consistent signals have been
heard from 30 July to 08 August. Signals seem to be weaker than usual,
confirmed by the many reports received. However,since I last heard the
satellite on 30 April, I've reinstalled my antennas , which makes
comparisons difficult.

Many thanks for all the recent reports of OSCAR-11 including those from
KU7Z (who heard it first), KB2M, VK6XH, HK7MKE, KA2UPW, JE9PEL, G1OCN,
HB9SKA and G8OQW.

All the analogue telemetry channels, 0 to 59 are zero, ie they have failed. The status channels 60 to 67 are still working. One bit in channel 62, DSR mode, has changed from WRITE to READ. DSR is the Digital Store & Readout experiment. This could be significant if the experiment is still drawing current, but the other status bit indicates that it is switched OFF.

The on-board clock is now showing a very large error. It has lost approximately 19 days since 30 April. During the recent data collection period, the clock error has been changing at a decreasing rate. The size of the clock error and the rate at which it is changing is similar to the duration of the solar eclipse periods. This suggests that the clock might have been switching OFF during eclipses.

The eclipses have now ended, and the satellite should be in continuous sunlight for the remainder of this year, and well into next year. This should help the satellite to continue transmitting, although continuous sunlight can cause problems due to excessive temperatures.

If the watchdog timer is still operating on a 20 day cycle, ie. approximately ten days ON followed by 10 days OFF, then the VHF beacon should resume transmissions around 18 August.

The Beacon frequencies are -

VHF 145.826 MHz. AFSK FM ASCII Telemetry

UHF 435.025 MHz. OFF

S-band 2401.5 MHz. OFF

Listeners to OSCAR-11 may be interested in visiting my website which contains an archive of news & telemetry data. It also contains details about using a soundcard or hardware demodulators for data capture. There is software for capturing data, and decoding ASCII telemetry. The URL is www.users.zetnet.co.uk/clivew/

If you place this bulletin on a terrestrial packet network, please use the bulletin identifier $BID:U2RPT112.CWV, to prevent duplication.

[ANS-WSR thanks Clive, G3CWV, for the above information]

More information on UO-11 OSCAR-11 can be found at:
http://www.users.zetnet.co.uk/clivew/

MPEG3 files can be found here at Mineo, JE9PEL website:
http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm

[08212005]
NNNN
/EX

SB SAT @ AMSAT <KB9MMC $ANS-233.S3
WSR 233 Part 3 08/21/2005

AMSAT NEWS SERVICE BULLETIN 233.S3 FROM AMSAT HQ
SILVER SPRING, MD, AUGUST 21, 2005
TO ALL RADIO AMATEURS
BID: $ANS-233.S3

THE FOLLOWING ARE IN ORBIT BUT ARE
NON-OPERATIONAL AT THIS TIME:

POSAT-1 PO-28
Catalog Number: 22829
Launched : September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 435.250 MHz
435.275 MHz

Uplink: 145.925 MHz
145.975 MHz

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

PO-28 (POSAT-1), Portugal's first satellite, launched 12 years ago, will be turned over to Amateur Radio use in the very near future. That was the word July 30 from AMSAT-UK Secretary Jim Heck, G3WGM, during the AMSAT-UK International Space Colloquium in Guildford, England.

Launched September 25, 1993, the satellite operated as a packet store-and-forward BBS (9600 baud FM FSK) on Amateur Radio frequencies for several weeks in early 1994. Over the years, PO-28's primary usage has been commercial, although plans have called for eventually shifting its operation to ham radio use. G3WGM reports that following lengthy negotiations it has been agreed that the satellite can be switched permanently to amateur frequencies. The changeover is expected to take a couple of weeks.

The Portuguese satellite was built at the University of Surrey as part of a collaborative satellite technology program that involved industry and academe. Uplink frequencies will be 145.925 and 145.975 MHz. Downlink frequencies will be 435.250 and 435.275 MHz. More information on PO-28 is on the AMSAT Web site http://www.amsat.org/amsat/sats/n7hpr/po28.html.

Uplink Frequencies: 145.925 and 145.975 MHz
Downlink Frequencies: 435.250 and 435.275 MHz

Orbit: 822 x 800 km, 98.6 deg inclined, sun-synchronous.

Transponder capabilities include FM repeater and 38k4 data. If you want to hear how loud this satellite is, listen on 429.950 until the change back to amateur radio service.

Keplerian elements for PO-28 are not currently contained in the AMSAT keps bulletins, but can be found at Celestrak in amateur.txt using the name "POSAT". Users of Space Track should query the NORAD Satellite ID number 22829. The name listed by Space Track is "EYESAT A".

More information of POSAT-1 can be found at:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
http://www.amsat.org/amsat/sats/n7hpr/po28.html
[ANS-WSR wishes to thanks Trevor, M5AKA and Jim, G3WGM, for this week's information.]
[08072005]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon: 145.810 MHz (unmodulated carrier)

AO-10 has been locked into a Mode-B, 70-cm uplink and
2-meter downlink for several years.

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Non-operational

Uplink: 145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink: 435.812 MHz SSB
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Alberto E. Zagni - I2KBD reports on 02/13/05
The spacecraft is in MBL (safe mode) and is trasmitting just 6 channels of telemetry. Temperatures and voltage are nominal, but there seems to be a problem with the onboard receiver, refusing to accept commands. The spacecraft was launched in 1993, thus nearing 12 years in orbit...

Best regards
Alberto E. Zagni - I2KBD
ITAMSAT Mission Director

More information of IO-26 can be found at:

http://joshua.micronet.it/english/itamsat/itamsathome.html
http://www.amsat.org/amsat/sats/n7hpr/io26.html
www.itamsat.org

[02132005]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089

Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon: 29.408 MHz
Robot: 29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB
Beacon: 145.860 MHz
Robot: 145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB
Beacon: 29.352 MHz (intermittent)

SSB meeting frequency: 29.380 MHz (unofficial)

John, KD6PAG reports on June 16, 2004 to ANS:
RS-15 beacon seemed to be back in the mode where it's a tone about 5 seconds
off and then 5 seconds on this morning.

ANS is looking for more confirmations of RS-15 coming back.

[ANS thanks John, KD6PAG for RS-15 information]
[06202004]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplink: 145.84 145.86 145.88 145.90 MHz FM
(using 1200-baud Manchester FSK)
CW downlink: 437.125 MHz
Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)
Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM
Broadcast Callsign: HLO1-11
BBS: HLO1-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a
non-operational status.
[05092004]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM (9600-baud FSK)
Downlink: 436.500 MHz FM
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink frequency (listed on the PanSat web site) 436.500 MHz

The satellite is not available for general uplink transmissions.

The Naval Postgraduate School developed PanSat. At the time of
launch, PanSat spread-spectrum digital transponders were to
be available to Amateur Radio operators along with software to utilize
this technology.

The satellite is still operating, however, the spread spectrum packet
radio portion never took place. The spacecraft is now beyond it's
initial 2-year mission life, but telemetry records are still being
downloaded.

For more information, visit the official PanSat web site at:
http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS has no further information]
[05232004]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlink: 437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA
web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplink V-band 145.840 - 145.990 MHz CW/LSB
U-band 435.550 - 435.800 MHz CW/LSB
L1-band 1269.250 - 1269.500 MHz CW/LSB
L2-band 1268.325 - 1268.575 MHz CW/LSB
S1-band 2400.350 - 2400.600 MHz CW/LSB
Downlink: S2-band 2401.225 - 2401.475 MHz CW/USB
K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon: 2401.323, 24,048.035
[05232004]

SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational
Downlink: 437.075 MHz
Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz
Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
callsign KE6QMD, as per the user service agreement located at the following
URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Semi-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

AO-49 (SAFIR-M) is a German amateur radio payload onboard the small German
scientific satellite "RUBIN-2".

AO-49 was built by the German amateur radio association "AATiS
e.V." (German
acronym for "Arbeitskreis Amateurfunk und Telekommunikation in der Schule",
which means: 'working group for amateur radio anand telecommunications in
schools'). AO-49 is designed as a "store and broadcast" system for APRS
based messages, dedicated for the use of schools in combination with the
existing WX-Net and planned buoy experiments in Germany.

No transmissions detected since the 1st of February 2003! It appears
AO-49 is not properly aligned to illuminate the solar panels. This
should end soon. Due to its orbit, AO-49 will be in a phase without
eclipses until 13Feb03.

Martin DG8UAU has written a small software program "SAFIR-M Decoder" to
allow decoding of the received DATA0 frames. It is available at:
http://amend.gmxhome.de in the section Aktuelles.

Details on AO-49 (SAFIR-M) can be found at:
http://amend.gmxhome.de

Information about AATiS e.V. is available at:
http://www.aatis.de
[05092004]
NNNN
/EX

SB SAT @ AMSAT <KB9MMC $ANS-233.S4
WSR 233 Part 4 08/21/2005

AMSAT NEWS SERVICE BULLETIN 233.S4 FROM AMSAT HQ
SILVER SPRING, MD, AUGUST 21,2005
TO ALL RADIO AMATEURS
BID: $ANS-233.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE
PROPOSED FOR LAUNCH AT THIS TIME:

UCISAT ?O-??
Catalog number:
Proposed Launch Date: October 31, 2005

Status: Under Construction

Downlink: Submission in Progress
Uplink: Submission in Progress
Callsign: Submission in Progress

This from Matt Bennett, KF6RTB, UCISAT Communications Team Member:

Our website is www.ucisat.net .This is a new website, however, and doesn't
have the "Status" section active yet. Because of the growing interest in our
project, I'll push our webmaster to create updates (hopefully) on a week-to-
week basis. For now, the current status of the mission is as follows:

-Expected Launch Date: October 31st, 2005
-Frequency Allocation: Submission in Progress
-Construction Status: Sub-Assembly
[WSR to thank Matt Bennett, KF6RTB, for this week's report.]
[01302005]
=====
SSETI ?O-??
Catalog Number:
Proposed Launch Date: LATE 2005

Status: AWAITING LAUNCH

Graham, G3VZV reports:
We have now been advised that the revised launch date for SSETI Express and
the other satellites on the DMC3 COSMOS launch has been confirmed as
September
27th - so please keep those fingers crossed!

SpaceDaily has a report about SSETI at:
http://www.spacedaily.com/news/internet-04zzzu.html

You can find more info about SSETI at:
http://sseti.gte.tuwien.ac.at/WSW4/

Looking at the website for the SSETI Express webcam
http://sseti.gte.tuwien.ac.at/WSW4/webcam.htm

[ANS thanks Graham, G3VZV for the above information]
[07312005]
=====
PHASE 3E ?O-??
Catalog Number:
Proposed Launch Date: Early 2006

Status: Under Construction

William Leijenaar, PE1RAH reports on July 16th, 2005:

Hi AMSATs,

I always like to inform the AMSATs public about my P3e work, but
unfortunatly due to
some reasons there was not much time and nothing much to say...

However, now I am happy to announce that the my MODE-UV transponder design
for P3e is ready at the P3e integration place in Marburg (Germany). About 4
weeks ago I was in Marburg before, where the transponder has been checked.
Unfortunatly some unsure things were found in the design. The unsure things
were about long term stability after many years in space.

At home in The Netherlands, I changed the design with some minor changes to
have a secure long term stability. Finally I tested the transponder again
and it performed well within the specifications. Again something learned for
future transponder designs :o)

Last Wednesday I drove to AMSAT-DL P3e integrations place in Marburg again, and have my transponder again checked. In the beginning it seemed that the 70cm receiver lost 10dB in sensetivity. After some more measurements we find out that it was due to a bad attenuator we used for protection at the input.

Together with Karl Meinzer we looked for any problems, but so far we could see (without HELAPS) all was okay. In the afternoon I went back home again, this time without the MODE-UV.

Now the MODE-UV will get a new home, the home of P3e... :o)
I hope the transponder will work like its elder sister in AO-10, and you all will enjoy it for many years...

It was lots of work to get it this far, but I know it is for a good purpose...

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/

[ANS-WSR wishes to thank William Leijenaar, PE1RAH for this week's report]
[07172005]
=====
CP1 ?o-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N6CP
Proposed Transmit Frequency: 436.845
[03272005]
=====
CP2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.325
[03272005]
=====
HAUSAT1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: D90HP
Proposed Transmit Frequency: 437.465
[03272005]
=====
ICE Cube 1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: W2CXM
Proposed Transmit Frequency: 437.305
[03272005]

=====
ICE Cube 2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N2VR
Proposed Transmit Frequency: 437.425
[03272005]
=====
ION ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.505
[03272005]
=====
KUTEsat ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: KC0RMW
Proposed Transmit Frequency: 437.385
[03272005]
=====
MEROPE ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: K7MSU-1
Proposed Transmit Frequency: 145.980
[03272005]
=====
nCUBE1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
2407.25
[03272005]
=====
RINCON ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
437.345
[03272005]
=====
SACRED ?O-??

Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SEEDS ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: JQ1YGU
Proposed Transmit Frequency: 437.485
[03272005]
=====
Mea Huaka ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.405
[03272005]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satelite Report Editor is James K. Darrow, KB9MMC.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

358. HamPoll.Com

Newsgroup: rec.radio.amateur.space
Date: 2005-08-23 21:22:07 UTC
From: Charles Brabham <n5pvl@sbcglobal.net>
Message-ID: <3sMOe.1023$yo7.378@newssvr23.news.prodigy.net>
Source record: 1922

HamPoll is here in order to give amateurs a chance to speak for themselves, and in time to provide reasonably accurate and significant polling data on a variety of issues related to the amateur radio service.

You are welcome to browse the polling data we have, but we especially encourage US amateurs visiting here to register with thier callsign and vote in the HamPoll Polling Station.

Whether you come to browse, to discuss or submit new polls, or to tender your vote, be sure to visit regularly as new polls are included from time to time, and the poll data changes as more hams participate day to day.

Stop by at: http://www.hampoll.com

Charles Brabham, N5PVL

Director: USPacket http://www.uspacket.org
Admin: HamBlog.Com http://www.hamblog.com
---------- HamPoll.Com http://www.hampoll.com
---------- DigiBlog http://www.uspacket.org/digiblog/

359. Hamsat VO-52 still on???

Newsgroup: rec.radio.amateur.space
Date: 2005-08-26 13:25:13 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <vrmdneAqId72hZLeRVn-oQ@bright.net>
Source record: 1923

I've been listening for the past couple days and have not heard VO-52 on its scheduled passes over North America. Has anybody heard it lately?

Scott
N0EDV

360. ANS-240 AMSAT Weekly News Bulletins

Newsgroup: rec.radio.amateur.space
Date: 2005-08-29 12:03:53 UTC
From: JoAnne Maenpaa <wb9jej_no-spam@earthlink.net>
Message-ID: <JQCQe.4145$FW1.962@newsread3.news.atl.earthlink.net>
Source record: 1924

AMSAT NEWS SERVICE
ANS-240

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:

* AMSAT Symposium
* HAMSAT Reports Needed
* AMSAT Election Deadline Approaching
* ARISS Status - 28 August 2005
* Volunteer Station Needed

SB SAT @ AMSAT $ANS-240.01
AMSAT Symposium

AMSAT News Service Bulletin 240.01
From AMSAT HQ SILVER SPRING, MD.
August 28, 2005
To All RADIO AMATEURS
BID: $ANS-240.01

Remember that the "AMSAT rate" at the Holiday Inn in Lafayette runs out September 22, 2005. Please book through the AMSAT block.
And if you pre-register you save $ 10 and you can do it online: http://www.amsat.org/amsat-new/symposium/.
The Symposium is Oct 7th thru Oct 9th in Lafayette, LA. Home of the Silicon Bayou.

AGENDA FOR THE 2005 AMSAT-NA SPACE SYMPOSIUM and ANNUAL MEETING

Thursday October 6, 2005
Morning
8 am-noon AMSAT Board Meeting
noon-1 pm AMSAT Board Lunch Break

Afternoon
1 pm-5 pm AMSAT Board Meeting
5 pm-6pm AMSAT Board Dinner Break

Evening
6 pm-9 pm AMSAT Board Meeting

Friday October 7, 2005
Morning
8 am-noon AMSAT Board Meeting

Afternoon
1 pm-5 pm AMSAT Symposium

Evening
5:30 pm Shrimp Boil
7:30 pm President's Club Meeting

Saturday October 8, 2005
Morning
8 am-noon AMSAT Symposium
noon-1 pm Lunch on own

Afternoon
1 pm -1:30 pm Awards Ceremony
1:30-4 pm AMSAT Symposium
4 pm-5 pm AMSAT Annual Meeting

Evening
7-7:30 pm Attitude Adjustment
7:30-10 PM Banquet

Sunday, October 9, 2005
Morning
7 am-9:00 am Area Coordinators Breakfast
7:00 am First Swamp Tour
9:30 am Second Swamp Tour
11:00 am IARU Meeting

Spouse Program on Saturday
Depart 9:30 AM
1st stop - Vermillionville - Vermillionville is a replica of an Acadian village of the early 18th century. This is similar to Williamsburg, VA, where the staff is in costume and the craft persons make arts and craft items with period tools. This depicts the life of the Acadian living on the bayous and gives a flavor of the culture and hardship of living in Acadiana in the 1800s. It will take about 90 minutes to see the exhibits.

2nd stop - The Cathedral Oak - This is a 200 year old oak tree where the canopy is way over 100 feet in diameter.

3rd stop - The Mouton Home - This is the home of the founder of Lafayette and is a typical home of the period.

4th stop - Hotel - The group should return to the hotel at approximately 1:00 PM.

Lagniappes - Departs the hotel at 1:15 For those hardy shoppers who have the energy and the desire, there will be a visit to a local flea market where there is marketing of arts and crafts made by craft persons of the area. This group will return to the hotel at approximately 3:00 pm.

There will be a nominal cost of approximately $20 to cover the transport-ation cost and entrance fees.

A late addition to the agenda for the Amsat Symposium in Lafayette is a meeting of the Eagle project team. This meeting will also be open to all other interested AMSAT members.

If you are an AMSAT member, not on the Eagle team, and would like to attend, please advise wb4gcs@amsat.org. All AMSAT members are welcome, we'd just like to know who and how many are attending, so we can be prepared.

[ANS thanks the AMSAT Symposium team & Martha for the above information]

/EX

SB SAT @ AMSAT $ANS-240.02
HAMSAT Reports Needed

AMSAT News Service Bulletin 240.02
From AMSAT HQ SILVER SPRING, MD.
August 28, 2005
To All RADIO AMATEURS
BID: $ANS-240.02

Hi All
One of the members of the Mission Management Board at ISTRAC called me this afternoon to enquire about the latest feedback on Hamsat usage around the globe.
I request you to kindly send in your feedback reports to reports@amsat.in as this will help the MMB ISTRAC to complie the latest reports & payload evaluation in time before their meeting scheduled for 29 Aug 2005.

[ANS thanks VU2POP, Pop, for the above information]

/EX

SB SAT @ AMSAT $ANS-240.03
AMSAT Election Deadline Approaching

AMSAT News Service Bulletin 240.03
From AMSAT HQ SILVER SPRING, MD.
August 28, 2005
To All RADIO AMATEURS
BID: $ANS-240.03

Your votes do count.

With the deadline for the receipt of ballots for the AMSAT Board of Directors less than a month away, Bill Hook, W3QBC, who heads up AMSAT's Ballot Counting Committee, advises that to date only 609 ballots have been received. This amounts to only 15% of the total number of ballots mailed to members.

Votes are needed to select the 4 best qualified to serve among the 8 candidates. The biographical information as submitted by the Candidates can be found on the AMSAT website at http://www.amsat.org/amsat-new/AboutAmsat/candidate_bios.php

To be counted, ballots must be received at the AMSAT office before the close of business on Thursday, 15 September 2005.

[ANS thanks Bill W3QBC for the above information]

/EX

SB SAT @ AMSAT $ANS-240.04
ARISS Status - 28 August 2005

AMSAT News Service Bulletin 240.04
From AMSAT HQ SILVER SPRING, MD.
August 28, 2005
To All RADIO AMATEURS
BID: $ANS-240.04

ARISS Status
August 28, 2005

1. Arizona Contact a Success!

On Wednesday, August 17, the children at D.W. Higgins Institute in Tempe, Arizona, experienced an ARISS contact with John Phillips, KE5DRY. The astronaut was able to answer 23 of the 24 questions posed to him by twelve students before the ISS went over the horizon. An audience of approximately 200 students, teachers, and others witnessed the contact. Special guests attending the event included the mayor of Tempe, Phillips' parents and his sister, Maura Mackowski, whose son, Ben, is a sixth grader at the school. Mackowki was impressed with the Q & A session and wrote a thank you note to JSC, expressing her gratitude for a job well done, noting Steve Bible, N7HPR, in particular, for setting up and working his radio during the contact.
Among the media present were two television channels (5 and 12) and two news papers, The Arizona Republic and East Valley Tribune.

Arizona Republic's article, "Tempe students radio space station, talk to astronaut," may be found at:
http://www.azcentral.com/families/education/articles/0817t-space-ON.html

East Valley Tribune ran a story, "Students use radio to chat with astronaut in orbit." See:
http://www.eastvalleytribune.com/index.php?sty=46392

The Channel 12 news video clip of the event, "Students speak with astronauts aboard International Space Station," is available for viewing. See: http://www.azcentral.com/12news/video/12video_index.html

2. Upcoming School Contacts

The Sapporo Junior Amateur Radio Club in Sapporo, Kokkaido, Japan has been scheduled for a contact on Monday, August 22 at 14:26 UTC.

The 2005 World Expo in Aichi, Japan has been approved for an ARISS contact. It has been scheduled for Friday, September 2 at 09:45 UTC.

3. ARISS International Meeting

ARISS delegate Rosalie White has submitted minutes from the U.K. meeting to the other delegates for comments. Once finalized, they will be posted to the ARISS and AMSAT websites.

The next ARISS International Teleconference will be held on Tuesday, August 23.

4. ARRL Article on Krikalev

On August 12, the ARRL ran a web story on Sergei Krikalev, U5MIR. "ISS commander sets new space endurance record" is posted on the website. See: http://www.arrl.org/

5. SSTV Safety Review Held

On Friday, August 19, the JSC Payload Safety Review Panel (PSRP) met with members of ARISS-U.S. to discuss the certification of the SSTV/Vox box and two cables which the ARISS-U.S. team is providing to the project. Once the ARISS team submits supporting documentation, the certification document will be signed. The Russian team will provide the webcam and will provide the safety certification for the integrated system. The SSTV is expected to fly on 19P which is scheduled for a September launch.

6. Space Tourist Issued Callsign

Greg Olsen took and passed his amateur radio exam on Friday, August 12, and was issued the callsign, KC2ONX. Olsen, slated to be the next space tourist, will fly with Expedition 12 crew members, Bill McArthur, KC5ACR, and Valery Tokarev in October. Sergey Samburov, RV3DR, will provide training on the ARISS radio system and operations so that he may participate in school contacts while on board the ISS. ARRL ran an article on Olsen, entitled, "Next ISS 'Space Tourist' Gets Amateur Radio Ticket." See: http://www.arrl.org/news/stories/2005/08/18/3/?nc=1

[ANS thanks Carol, KB3LKI for the above information]

/EX

SB SAT @ AMSAT $ANS-240.05
Volunteer Station Needed

AMSAT News Service Bulletin 240.05
From AMSAT HQ SILVER SPRING, MD.
August 28, 2005
To All RADIO AMATEURS
BID: $ANS-240.05

Here is your chance to become a viable part of the Amateur
Satellite Community.

We are looking for a volunteer satellite packet
station in Hawaii that is interested in helping with
telemetry and sat-gating of PCSAT2 and
ARISS packets. Requirements are:

1) General familiarity with packet
2) TNC connected to a cross band radio that
can RX on UHF and TX on VHF.
3) modest UHF beam and rotator system.

Contact WB4APR for more information.

[ANS thanks Bob, WB4APR, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the
President's Club. Members of the President's Club, as sustaining donors
to AMSAT Project Funds, will be eligible to receive additional benefits.
Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Dee Interdonato, NB2F
nb2f at amsat dot org

361. WSR-240 AMSAT Weekly Satellite Report

Newsgroup: rec.radio.amateur.space
Date: 2005-08-29 12:04:54 UTC
From: JoAnne Maenpaa <wb9jej_no-spam@earthlink.net>
Message-ID: <GRCQe.4146$FW1.375@newsread3.news.atl.earthlink.net>
Source record: 1925

```
This report is organized into 4 parts.
Part 1 - operational analog amateur satellites.
Part 2 - operational digital amateur satellites.
Part 3 - non - operational satellites
Part 4 - proposed satellites

SB SAT @ AMSAT <KB9MMC $ANS-240.S1
WSR 240 Part 1 08/28/2005

AMSAT NEWS SERVICE BULLETIN 240.S1 FROM AMSAT HQ
SILVER SPRING, MD, AUGUST 28, 2005
TO ALL RADIO AMATEURS
BID: $ANS-240.S1

VO-52 HAMSAT
Catalog Number: 28650
Launch Date: May 05,2005

Status: On orbit
Current Mode: U/V

Proposed frequencies:
-------------------
Indian transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacom : 145.940MHz continue carier signal

Dutch transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacon : 145.860MHz 12WPM with CW message
[07242005]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - OFF
FM REPEATER - V/U HIGH POWER

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
Analog voice uplink: 145.880 MHZ FM
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone
```

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

Current scheduled operating modes:

22 Aug
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital

[ANS-WSR thanks Mike, KE4AZN for the above information]
[07312005]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz (67.0 Hz PL tone) (See below for operating
procedures)
Downlink: 436.795 MHz

There have been unconfirmed reports on the amsat-bb remailer that SO-50 has
shifted downlink frequency as much as 5khz up. This both from Europe.

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The
order of operation is thus: (allow for Doppler as necessary)

1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm
the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT
the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window
will reset the 10 minute timer.
[09122004]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB

Beacon: 435.795 MHz

Digital Mode JD
Uplink: 145.850 145.870 145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

John, N4QWL reports on July 16th, 2005:

Last evening I had a AOS to LOS qso with WI2W. FO-29 came up at 01:17z here in FM07 and I found WI2W and we chatted until 01:33z. The satellite was at 2 degrees elevation when I finally heard him start to crackle a bit. What a great QSO! To think that I watched this bird launch back in 1996 and it is still working so well is a real thrill. I believe I still have the video. I might just look for it and watch it again. Boy do I love this satellite stuff! Look for you all up there.

Please send the reception reports to lab2 'at' jarl.or.jp.
Please use the subject line: 'FO-29 reception report'.

Mineo, JE9PEL, has an FO-29 satellite telemetry analysis program that will automatically analyze all digital telemetry from the satellite (such as current, voltage and temperature). FO29CWTE is available at:
http://www.ne.jp/asahi/hamradio/je9pel/
[ANS-WSR wishes to thanks John, N4QWL for this week's report]
[07172005]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

The latest information on AO-27 from control operator Michael Wyrick, N3UC (former N4USI), can be found at:
http://www.ao27.org

An AO-27 question-and-answer page is available on the AMSAT-NA web site, with updates by Ray, W2RS. The URL is:
http://www.amsat.org/amsat/intro/ao27faq.html

[ANS-WSR thanks John, K6YK, for this week's AO-27 report]
[08292004]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Semi-operational in sunlight.
Return to active status: June 21,2002

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A
145.975 to 145.925 MHz CW/USB Mode B
Beacon: 29.502 MHz, 145.972 MHz, 435.1 MHz, 2304.1 MHz

Emily, W0EEC has created a website to allow the users of AO-7 to record
contacts, observations and use of the satellite more effectively at:
http://www.emilyshouse.com/experthams/ao7/main.php
This includes the ability to log contacts.

Tim, K3TZ has written a program to decode AO-07 telemetry.
The program can be downloaded at:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

For more AO-7 info:
http://www.amsat.org/amsat/sats/n7hpr/ao7.html
[11142004]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: U/V CROSS-BAND REPEATER
Digipeater: Inactive

The current Expedition 11 crew is:
Commander Sergei Krikalev
Flight Engineer John Phillips

Worldwide packet uplink: 145.990 MHz FM
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM
Doppler Shift is 10 KHz

Russian callsigns: RS0ISS, RZ3DZR
USA callsign: NA1SS
Packet station mailbox callsign: RS0ISS-11
Packet station keyboard callsign: RS0ISS-3
Digipeater callsign: ARISS

This off the ARISS webpage:
http://www.rac.ca/ariss/oindex.htm#New%20ARISS%20Operations :
The ARISS program is pleased to announce that the amateur radio equipment
aboard the International Space Station is now operating in cross-band repeat
mode. We realize that many of you will miss the packet-operating mode. How-
ever, cross-band repeat allows further experimentation of the ISS amateur
radio system

The downlink for this operating mode remains the same, so listen for the station on 145.80 MHz. The new uplink frequency is 437.80 MHz. All frequencies
are subject to Doppler shifting. For further information on working satellites
and adjusting for Doppler shift, please review Emily Clark's (W0EEC) excellent
presentation on AMSAT's website:
http://www.amsat.org/amsat-new/information/faqs/Intro_sats.pdf

The ISS daily crew schedule can be found at:
http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is NOT
translated from Russian and posted.

More information is available at:
http://www.rac.ca/ariss
http://spaceflight.nasa.gov/station/reference/radio/
http://www.marexmg.org/fileshtml/unprotopage.html
http://www.issfanclub.com
http://oscar.dcarr.org/
[07242005]
NNNN
/EX

SB SAT @ AMSAT <KB9MMC $ANS-240.S2
WSR 240 Part 2 08/28/2005

AMSAT NEWS SERVICE BULLETIN 240.S2 FROM AMSAT HQ
SILVER SPRING, MD, AUGUST 28, 2005
TO ALL RADIO AMATEURS
BID: $ANS-240.S2

PCSAT2 ?0-??
Catalog Number:
Launch Date: August 1, 2005

Status: Operational

PCSAT2 was installed on the exterior of the International Space Station and was activated on August 3, 2005.

PCSAT2 CAPABILITIES: PCSAT2 is attached to the ISS and so its operations must be in cooperation with the ARISS communications suite to minimize any mutual interference and to coordinate activities. Here are the capabilities of the PCSAT2 and ARISS payloads:

PCSAT SYSTEM A:

435.275 PCSAT2 DOWNLINK 1200 baud packet with uplink on 145.825
435.275 PCSAT2 DOWNLINK Occasional user PSK-31 continuous downlink
145.825 PCSAT2 DOWNLINK 1200 baud packet
PCSAT SYSTEM B:

437.975 PCSAT2 DOWNLINK periodic Solar Cell data and PCSAT2 telemetry at
9600 baud
437.975 PCSAT2 DOWNLINK TNC-B command downlink at 1200 baud
437.975 PCSAT2 DOWNLINK User Voice Repeater with VHF uplink
437.975 PCSAT2 DOWNLINK Packet digipeater with VHF uplink

It looks like PCSAT2 can best contribute at this time by operating in
PSK-31 mode for the near future. This is a very exciting new transponder
mode which solves the congestion problem on FM repeaters by letting
multiple stations all communicate at the same time.

PSK-31 users are welcome to try out the new PCSAT2 PSK-31 transponder
on ISS with an uplink on 29.402 +/- 1 KHz and downlink on 435.275 +/-
Doppler using FM.

The FM downlink lets everyone operate full duplex and everyone to see
the same view of the passband as everyone else. THus you can see exactly
what your signal looks like to everyone else.

Help Wanted:

Here is your chance to become a viable part of the Amateur
Satellite Community.

We are looking for a volunteer satellite packet
station in Hawaii that is interested in helping with
telemetry and sat-gating of PCSAT2 and
ARISS packets. Requirements are:

1) General familiarity with packet
2) TNC connected to a cross band radio that
can RX on UHF and TX on VHF.
3) modest UHF beam and rotator system.

Contact WB4APR for more information.

Packets seen from PCSAT2 can be reviewed at:
http://www.findu.com/cgi-bin/pcsat2.cgi

A screen shot of both the 9600 bps and 1200 bps decoded data
as seen by Simon, 9W2QC, can be seen at:
http://www.9w2qc.net/pcsat2/

More information on PCSAT2 can be found at:
http://web.usna.navy.mil/~bruninga/pcsat2.html

[ANS-WSR thanks Bob, WB4APR and the U.S. Naval Academy Satellite Lab for
the aboveinformation.]

[08282005}
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - OFF
FM REPEATER - V/U HIGH POWER

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
Analog voice uplink: 145.880 MHz FM
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

Current scheduled operating modes:

22 Aug
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital

[ANS-WSR thanks Mike, KE4AZN for the above information]
[07312005]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Non-Operational?????

Uplink/downlink: 145.827 MHz 1200 baud AX.25 AFSK via W3ADO-1
Aux/Uplink: 435.250 MHz 9600 baud via PCSAT-2 (off)
APRS Downlink: 144.390 MHz (Region 2)

PCSat is a 1200-baud APRS digipeater designed for use by stations using
hand-held or mobile transceivers. Downlinks feed a central web site at:
http://pcsat.aprs.org

The APRS-equipped PCSat was built by midshipmen from the U.S. Naval Academy
under the guidance of Bob Bruninga, WB4APR.
[07242005]
=====
CUTE-1
Catalog number: 27844
Launched: June 30,2003

Status: Operational

Uplink: ?
Downlink: 436.8375 CW
437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)
Cliff, K7RR reports:
In the latest Weekly Satellite Report, CUTE 1, #27844 is listed as
OPERATIONAL?
Indeed it is very operational as a CUBESAT sending CW telemetry on
436.8345 MHz. At the July 7 2005, 23:45:20 pass over the Western USA:
CUTE 1 6B A4 xx 7F D7 66A8 4702 FF FF7C 65
CUTE 1 6C A6 59 80 D9 66A8 4702 FF FE7C B6

The June 30th KEPS were within ten seconds of AOS and LOS. It is an very
good object to practice tracking as the orbit and transmitter power are
similar to proposed CUBESATS awaiting launch this December. As a check for
Doppler correction, the lack of change in tone is an excellent indicator.

CUTE 1 is a Japanese (Tokyo Institute of Technology) one kilogram
nanosatellite that was launched by a Rokot rocket from Plesetsk at
14:15 UT on 30 June 2003. It carries a 100 mW beacon at 436.8375 MHz.
Initial orbital parameters were period 101.4 min, apogee 831 km, perigee
819 km, and inclination 98.7?.

For further info about CUTE-1 goto:
http://lss.mes.titech.ac.jp/ssp/cubesat/operation/Schedule_e.html

[ANS WSR wishes to thank Cliff, K7RR, for this week's information]
[07242005]
=====
GO-32 TECHSAT-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
(435.325 n/a - temperature problems)
Uplinks: 145.850, 145.890, 145.930 FM
1269.700, 1269.800, 1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[03132005]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink: 145.850 or 145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz
Broadcast callsign: MYSAT3-11

BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey Satellite Technology Ltd.
[05152005]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for APRS users.

Uplink: 145.90 145.92 145.94 145.96 MHz FM
(using 1200-baud Manchester FSK)
Downlink: 437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon: 2401.1428 MHz
Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

A WOD collection of current graphics along with general information and telemetry samples can be found at:
http://www.telecable.es/personales/ea1bcu
[05092004]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational?

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK).
approx. 10 days ON, 10 days OFF
Mode-S Beacon: 2401.500 MHz. ... OFF
UHFBeacon: 435.025 MHz. ... OFF

OSCAR-11 is back! I received the good news, on Saturday morning, while at the AMSAT-UK Colloquium. This was entirely unexpected! On Sunday morning Bob G4VRC played me a recording of an early morning pass received that day.

During the period 21 July to 14 August 2005 consistent signals have been heard from 30 July to 08 August. Signals seem to be weaker than usual, confirmed by the many reports received. However,since I last heard the satellite on 30 April, I've reinstalled my antennas , which makes comparisons difficult.

Many thanks for all the recent reports of OSCAR-11 including those from KU7Z (who heard it first), KB2M, VK6XH, HK7MKE, KA2UPW, JE9PEL, G1OCN, HB9SKA and G8OQW.

All the analogue telemetry channels, 0 to 59 are zero, ie they have failed. The status channels 60 to 67 are still working. One bit in channel 62, DSR mode, has changed from WRITE to READ. DSR is the Digital Store & Readout experiment. This could be significant if the experiment is still drawing current, but the other status bit indicates that it is switched OFF.

The on-board clock is now showing a very large error. It has lost approximately 19 days since 30 April. During the recent data collection period, the clock error has been changing at a decreasing rate. The size of the clock error and the rate at which it is changing is similar to the duration of the solar eclipse periods. This suggests that the clock might have been switching OFF during eclipses.

The eclipses have now ended, and the satellite should be in continuous sunlight for the remainder of this year, and well into next year. This should help the satellite to continue transmitting, although continuous sunlight can cause problems due to excessive temperatures.

If the watchdog timer is still operating on a 20 day cycle, ie. approximately ten days ON followed by 10 days OFF, then the VHF beacon should resume transmissions around 18 August.

The Beacon frequencies are -

VHF 145.826 MHz. AFSK FM ASCII Telemetry

UHF 435.025 MHz. OFF

S-band 2401.5 MHz. OFF

Listeners to OSCAR-11 may be interested in visiting my website which contains an archive of news & telemetry data. It also contains details about using a soundcard or hardware demodulators for data capture. There is software for capturing data, and decoding ASCII telemetry. The URL is www.users.zetnet.co.uk/clivew/

If you place this bulletin on a terrestrial packet network, please use the bulletin identifier $BID:U2RPT112.CWV, to prevent duplication.

[ANS-WSR thanks Clive, G3CWV, for the above information]

More information on UO-11 OSCAR-11 can be found at:
http://www.users.zetnet.co.uk/clivew/

MPEG3 files can be found here at Mineo, JE9PEL website:
http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm

[08212005]
NNNN
/EX

SB SAT @ AMSAT <KB9MMC $ANS-240.S3
WSR 240 Part 3 08/28/2005

AMSAT NEWS SERVICE BULLETIN 240.S3 FROM AMSAT HQ
SILVER SPRING, MD, AUGUST 28, 2005
TO ALL RADIO AMATEURS
BID: $ANS-240.S3

THE FOLLOWING ARE IN ORBIT BUT ARE
NON-OPERATIONAL AT THIS TIME:

POSAT-1 PO-28
Catalog Number: 22829
Launched : September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 435.250 MHz
435.275 MHz

Uplink: 145.925 MHz
145.975 MHz

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

PO-28 (POSAT-1), Portugal's first satellite, launched 12 years ago,
will be turned over to Amateur Radio use in the very near future. That
was the word July 30 from AMSAT-UK Secretary Jim Heck, G3WGM, during the
AMSAT-UK International Space Colloquium in Guildford, England.

Launched September 25, 1993, the satellite operated as a packet store-
and-forward BBS (9600 baud FM FSK) on Amateur Radio frequencies for several
weeks in early 1994. Over the years, PO-28's primary usage has been commer-
cial, although plans have called for eventually shifting its operation to
ham radio use. G3WGM reports that following lengthy negotiations it has
been agreed that the satellite can be switched permanently to amateur
frequencies. The changeover is expected to take a couple of weeks.

The Portuguese satellite was built at the University of Surrey as part of a
collaborative satellite technology program that involved industry and
academe. Uplink frequencies will be 145.925 and 145.975 MHz. Downlink
frequencies will be 435.250 and 435.275 MHz. More information on PO-28
is on the AMSAT Web site http://www.amsat.org/amsat/sats/n7hpr/po28.html.

Uplink Frequencies: 145.925 and 145.975 MHz
Downlink Frequencies: 435.250 and 435.275 MHz

Orbit: 822 x 800 km, 98.6 deg inclined, sun-synchronous.

Transponder capabilities include FM repeater and 38k4 data. If you want
to hear how loud this satellite is, listen on 429.950 until the change back
to amateur radio service.

Keplerian elements for PO-28 are not currently contained in the AMSAT
keps bulletins, but can be found at Celestrak in amateur.txt using the

name "POSAT". Users of Space Track should query the NORAD Satellite ID
number 22829. The name listed by Space Track is "EYESAT A".

More information of POSAT-1 can be found at:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
http://www.amsat.org/amsat/sats/n7hpr/po28.html
[ANS-WSR wishes to thanks Trevor, M5AKA and Jim, G3WGM, for this week's
information.]
[08072005]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon: 145.810 MHz (unmodulated carrier)

AO-10 has been locked into a Mode-B, 70-cm uplink and
2-meter downlink for several years.

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Non-operational

Uplink: 145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink: 435.812 MHz SSB
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Alberto E. Zagni - I2KBD reports on 02/13/05
The spacecraft is in MBL (safe mode) and is trasmitting just 6 channels
of telemetry. Temperatures and voltage are nominal, but there seems to
be a problem with the onboard receiver, refusing to accept commands.
The spacecraft was launched in 1993, thus nearing 12 years in orbit...

Best regards
Alberto E. Zagni - I2KBD
ITAMSAT Mission Director

More information of IO-26 can be found at:

http://joshua.micronet.it/english/itamsat/itamsathome.html
http://www.amsat.org/amsat/sats/n7hpr/io26.html
www.itamsat.org

[02132005]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon: 29.408 MHz
Robot: 29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB
Beacon: 145.860 MHz
Robot: 145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB
Beacon: 29.352 MHz (intermittent)
SSB meeting frequency: 29.380 MHz (unofficial)

John, KD6PAG reports on June 16, 2004 to ANS:
RS-15 beacon seemed to be back in the mode where it's a tone about 5 seconds
off and then 5 seconds on this morning.

ANS is looking for more confirmations of RS-15 coming back.

[ANS thanks John, KD6PAG for RS-15 information]
[06202004]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplink: 145.84 145.86 145.88 145.90 MHz FM
(using 1200-baud Manchester FSK)
CW downlink: 437.125 MHz
Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)
Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM
Broadcast Callsign: HLO1-11
BBS: HLO1-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a
non-operational status.
[05092004]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM (9600-baud FSK)
Downlink: 436.500 MHz FM
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink frequency (listed on the PanSat web site) 436.500 MHz

The satellite is not available for general uplink transmissions.

The Naval Postgraduate School developed PanSat. At the time of
launch, PanSat spread-spectrum digital transponders were to
be available to Amateur Radio operators along with software to utilize
this technology.

The satellite is still operating, however, the spread spectrum packet
radio portion never took place. The spacecraft is now beyond it's
initial 2-year mission life, but telemetry records are still being
downloaded.

For more information, visit the official PanSat web site at:
http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS has no further information]
[05232004]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlink: 437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA
web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplink V-band 145.840 - 145.990 MHz CW/LSB
U-band 435.550 - 435.800 MHz CW/LSB
L1-band 1269.250 - 1269.500 MHz CW/LSB
L2-band 1268.325 - 1268.575 MHz CW/LSB
S1-band 2400.350 - 2400.600 MHz CW/LSB
Downlink: S2-band 2401.225 - 2401.475 MHz CW/USB
K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon: 2401.323, 24,048.035
[05232004]

SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational
Downlink: 437.075 MHz
Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz
Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
callsign KE6QMD, as per the user service agreement located at the following
URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Semi-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

AO-49 (SAFIR-M) is a German amateur radio payload onboard the small German
scientific satellite "RUBIN-2".

AO-49 was built by the German amateur radio association "AATiS
e.V." (German
acronym for "Arbeitskreis Amateurfunk und Telekommunikation in der Schule",
which means: 'working group for amateur radio anand telecommunications in
schools'). AO-49 is designed as a "store and broadcast" system for APRS
based messages, dedicated for the use of schools in combination with the
existing WX-Net and planned buoy experiments in Germany.

No transmissions detected since the 1st of February 2003! It appears
AO-49 is not properly aligned to illuminate the solar panels. This
should end soon. Due to its orbit, AO-49 will be in a phase without
eclipses until 13Feb03.

Martin DG8UAU has written a small software program "SAFIR-M Decoder" to
allow decoding of the received DATA0 frames. It is available at:
http://amend.gmxhome.de in the section Aktuelles.

Details on AO-49 (SAFIR-M) can be found at:
http://amend.gmxhome.de

Information about AATiS e.V. is available at:
http://www.aatis.de
[05092004]
NNNN
/EX

SB SAT @ AMSAT <KB9MMC $ANS-240.S4
WSR 240 Part 4 08/28/2005

AMSAT NEWS SERVICE BULLETIN 240.S4 FROM AMSAT HQ
SILVER SPRING, MD, AUGUST 28,2005
TO ALL RADIO AMATEURS
BID: $ANS-240.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE
PROPOSED FOR LAUNCH AT THIS TIME:

UCISAT ?O-??
Catalog number:
Proposed Launch Date: October 31, 2005

Status: Under Construction

Downlink: Submission in Progress
Uplink: Submission in Progress
Callsign: Submission in Progress

This from Matt Bennett, KF6RTB, UCISAT Communications Team Member:

Our website is www.ucisat.net .This is a new website, however, and doesn't
have the "Status" section active yet. Because of the growing interest in our
project, I'll push our webmaster to create updates (hopefully) on a week-to-
week basis. For now, the current status of the mission is as follows:

-Expected Launch Date: October 31st, 2005
-Frequency Allocation: Submission in Progress
-Construction Status: Sub-Assembly
[WSR to thank Matt Bennett, KF6RTB, for this week's report.]
[01302005]
=====
SSETI ?O-??
Catalog Number:
Proposed Launch Date: LATE 2005

Status: AWAITING LAUNCH

Graham, G3VZV reports:
We have now been advised that the revised launch date for SSETI Express and
the other satellites on the DMC3 COSMOS launch has been confirmed as
September
27th - so please keep those fingers crossed!

SpaceDaily has a report about SSETI at:
http://www.spacedaily.com/news/internet-04zzzu.html

You can find more info about SSETI at:
http://sseti.gte.tuwien.ac.at/WSW4/

Looking at the website for the SSETI Express webcam
http://sseti.gte.tuwien.ac.at/WSW4/webcam.htm

[ANS thanks Graham, G3VZV for the above information]
[07312005]
=====
PHASE 3E ?O-??
Catalog Number:
Proposed Launch Date: Early 2006

Status: Under Construction

William Leijenaar, PE1RAH reports on July 16th, 2005:

Hi AMSATs,

I always like to inform the AMSATs public about my P3e work, but
unfortunatly due to
some reasons there was not much time and nothing much to say...

However, now I am happy to announce that the my MODE-UV transponder design
for P3e is ready at the P3e integration place in Marburg (Germany). About 4
weeks ago I was in Marburg before, where the transponder has been checked.
Unfortunatly some unsure things were found in the design. The unsure things
were about long term stability after many years in space.

At home in The Netherlands, I changed the design with some minor changes to
have a secure long term stability. Finally I tested the transponder again
and it performed well within the specifications. Again something learned for
future transponder designs :o)

Last Wednesday I drove to AMSAT-DL P3e integrations place in Marburg again, and have my transponder again checked. In the beginning it seemed that the 70cm receiver lost 10dB in sensetivity. After some more measurements we find out that it was due to a bad attenuator we used for protection at the input.

Together with Karl Meinzer we looked for any problems, but so far we could see (without HELAPS) all was okay. In the afternoon I went back home again, this time without the MODE-UV.

Now the MODE-UV will get a new home, the home of P3e... :o)
I hope the transponder will work like its elder sister in AO-10, and you all will enjoy it for many years...

It was lots of work to get it this far, but I know it is for a good purpose...

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/

[ANS-WSR wishes to thank William Leijenaar, PE1RAH for this week's report]
[07172005]
=====
CP1 ?o-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N6CP
Proposed Transmit Frequency: 436.845
[03272005]
=====
CP2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.325
[03272005]
=====
HAUSAT1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: D90HP
Proposed Transmit Frequency: 437.465
[03272005]
=====
ICE Cube 1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: W2CXM
Proposed Transmit Frequency: 437.305
[03272005]

=====
ICE Cube 2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N2VR
Proposed Transmit Frequency: 437.425
[03272005]
=====
ION ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.505
[03272005]
=====
KUTEsat ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: KC0RMW
Proposed Transmit Frequency: 437.385
[03272005]
=====
MEROPE ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: K7MSU-1
Proposed Transmit Frequency: 145.980
[03272005]
=====
nCUBE1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
2407.25
[03272005]
=====
RINCON ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
437.345
[03272005]
=====
SACRED ?O-??

Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SEEDS ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: JQ1YGU
Proposed Transmit Frequency: 437.485
[03272005]
=====
Mea Huaka ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.405
[03272005]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satelite Report Editor is James K. Darrow, KB9MMC.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

362. Re: note to rec.radio.amateur.space readers

Newsgroup: rec.radio.amateur.space
Date: 2005-08-30 16:54:05 UTC
From: "tomstdenis@gmail.com" <tomstdenis@gmail.com>
Message-ID: <43148F2B.1DCC8D5E@gmail.com>
Source record: 1926

So you'll be on the next plane out to Baghdad ?

tomstdenis@gmail.com wrote:

> -----BEGIN PGP SIGNED MESSAGE-----
> Hash: SHA1
>
> It's getting a bit tiresome seeing one misguided American after another with
> their cutsie little yellow or red-white-blue ribbons on their outsized SUVs.
> Yeah, I guess it's the thing to do; maybe part of that whole soccer-mom
> culture. Unfortunately, the only thing they demonstrate is that the person
> behind the wheel is a clueless, gullible, misguided, nitwit.
>
> If foreign invaders landed on our soil, as we have done in Iraq, I would be
> the first one to take up arms and repel them. (I suppose that would make me
> an 'insurgent' by OUR logic.) This, and other aggressive governments have
> always done their utmost to make it APPEAR as if committing yourself to kill
> in feuds on distant shores that have nothing to do with the welfare of the
> citizenry is somehow patriotic.
>
> It is not.
>
> Enlisting in the armed forces, in the absence of a real and impending
> foreign threat, is no different that hiring yourself as a paid assassin . .
> the only difference is, you're not getting paid enough. But let's take a
> realistic look at exactly WHO joins up in an all-volunteer army.
>
> The first group are those who join (during peacetime) for the benefits: to
> get an education, or because it seems a reasonable career path. Consider
> carefully! Realize that you are gambling with your humanity. Once you sign
> that form, you sign away your right to say: "No, that is an atrocity." You
> put your abilities, including the ability to kill, at the disposal of proven
> liars, psychopaths . . . enemies of humanity. Do you think that every German
> soldier in World War II who helped load Jews into cattle cars was a
> cold-blooded killer? Most were poor kids, just like you, who got caught up
> in the patriotic frenzy. Once you're in, you're IN. You lose the ability to
> stop killing until they tell you so. This not only makes you less than
> human, it makes you less than an animal, for even the animals retain their
> freedom of self determination.
>
> The second group are the simple minded, who fall for patriotic entreaties
> about defending democracy, Mom, apple pie; in other words, all the
> traditional government propaganda. Do you think Soviet lads subjugated their
> neighbors throughout the world because they thought the Soviet Union was an
> EVIL empire? No, they were fighting for MOM, and whatever passes for apple

> pie in Russia. Step back and examine the lies your government is handing
> you, and ask yourself if they have the ring of truth. Do you want to be one
> of the murderers in uniform who opened up on their fellow citizens at Kent
> State? When you put on that uniform, you give up all autonomy, and become
> nothing more than a weapon, to be used for whatever evil purposes the
> scoundrels in government demand (and, if you look carefully, you will
> discover that the only interests THEY serve are those of the big businesses
> that own them.)
>
> Finally, you have the hard-core psychopaths. These are the people who WANT
> to kill. Murder, torture, rape; THESE are the American values upon which
> THIS group is focused. The cause doesn't matter, they're after the thrill
> that only warfare can provide.
>
> Just remember: killing for George W. Bush, or for George H.W. Bush, or for
> Lyndon B. Johnson, or for Richard M. Nixon is not the same as defending
> yourself, your family, your friends, or your country. Don't be a dupe. Don't
> Enlist!
>
> Remember -- supporting the troops means supporting Bush aggression,
> profiteering, and war crimes. Here's an idea: why not take those ribbons,
> dip them in blood, and mail them to the White House?
>
> - --
> Tom St.Denis
>
> 111 Banning Rd
> Kanata, Ontario
> K2L 1C3
> Canada
>
> Home: (613)836-3160
> Cell: (613)796-8220
>
> tomstdenis@gmail.com
> KeyID: 0x40B640D5
> Fingerprint: 53F9 307F F83E D52A 9E63
> C2A5 B43F D952 40B6 40D5
>
> http://pgp.mit.edu:11371/pks/lookup?op=get&search=0x40B640D5
>
> -----BEGIN PGP SIGNATURE-----
> Version: PGP 8.0.3
>
> iQA/AwUBQxLVO7Q/2VJAtkDVEQJnnQCg1mRyNVgZ6Po6Xf7csn62Ph9rkC8AoMxZ
> Zo8jLvfr6bDGWZb/PhEpz3c8
> =2NAY
> -----END PGP SIGNATURE-----

363. Re: note to rec.radio.amateur.space readers

Newsgroup: rec.radio.amateur.space
Date: 2005-09-02 19:26:35 UTC
From: Christopher Cox <chrisTOPHERcOX@coboxincORPOATED.comERCIAL>
Message-ID: <LH1Se.90704$gB.90416@tornado.ohiordc.rr.com>
Source record: 1927

I noticed you left out Clinton (the Balkan's) and Kennedy (Vietnam).

This means you are not being logical within your own argument.

Your motives are now in question.

Sorry, but you will have to try harder next time, which I am reasonably confident you will (try agian).

PS, what is your country doing to help with our existing crisis? I know its a bit early, but we have a real mess on our hands.

Regards

Chris

364. Re: note to rec.radio.amateur.space readers

Newsgroup: rec.radio.amateur.space
Date: 2005-09-02 20:14:44 UTC
From: bigamps <bigamps@even.louder.net>
Message-ID: <Uo2Se.30$am.19@news01.roc.ny>
Source record: 1928

Christopher Cox wrote:
...
> PS, what is your country doing to help with our existing crisis?

They're trying but the incompetence of the Bush administration...
http://storiesinamerica.dailykos.com/storyonly/2005/8/31/235829/261

365. Re: note to rec.radio.amateur.space readers

Newsgroup: rec.radio.amateur.space
Date: 2005-09-02 21:47:15 UTC
From: Christopher Cox <chrisTOPHERcOX@coboxincORPOATED.comERCIAL>
Message-ID: <4318C928.40806@coboxincORPOATED.comERCIAL>
Source record: 1929

bigamps wrote:
> Christopher Cox wrote:
> ...
>
>> PS, what is your country doing to help with our existing crisis?
>
>
> They're trying but the incompetence of the Bush administration...
> http://storiesinamerica.dailykos.com/storyonly/2005/8/31/235829/261

Hmmmm

Me thinks you are confusing Terrorist with the President.

"That said, the Canadian Red Cross is reportedly allowed into the area."

By the way, Thanks!

The press here is so fubar'd we have no idea that anyone from the
outside even cares except of course Chavez. Friends of Castro are
friends indeed.

Thank goodness Kerry is not in charge, what a photo op, from his yacht. :-)

Chris

366. Re: note to rec.radio.amateur.space readers

Newsgroup: rec.radio.amateur.space
Date: 2005-09-04 18:43:44 UTC
From: Tony VE6MVP <tony@REMOVEve6mvp.com>
Message-ID: <6mfmh15vdc542bpftjsoj28kv9qf3olfq9@4ax.com>
Source record: 1930

On Fri, 02 Sep 2005 19:26:35 GMT, Christopher Cox
<chrisTOPHERcOX@coboxincORPOATED.comERCIAL> wrote:

>This means you are not being logical within your own argument.
>
>Your motives are now in question.
>
>Sorry, but you will have to try harder next time, which I am reasonably
>confident you will (try agian).

That guy is an idiot.

>PS, what is your country doing to help with our existing crisis? I know
>its a bit early, but we have a real mess on our hands.

Vancouver's Urban Search and Rescue Team is currently in Louisiana to
assist in the search and rescue efforts in the areas of the state
ravaged by Hurricane Katrina. The team was deployed on August 31 and
is working with the Louisiana State Troopers and the U.S. National
Guard.
http://www.city.vancouver.bc.ca/usar/

Canadian warships to sail to Louisiana

Three Canadian warships, a coast guard vessel and three Sea King
helicopters will be sent to Louisiana on Tuesday with relief supplies
for the U.S. Gulf Coast.

http://www.cbc.ca/story/canada/national/2005/09/02/Canadian_ships_to_louisiana20050902.html

Tony

367. Re: note to rec.radio.amateur.space readers

Newsgroup: rec.radio.amateur.space
Date: 2005-09-05 00:52:50 UTC
From: Jim n Alaska <akjim1@removegmail.com>
Message-ID: <11hn5n3dcsd8795@corp.supernews.com>
Source record: 1931

Its local government responsibility to evacuate, I noticed school busses just sitting parked, the mayor blew it, future planning would help next time, I recommend, don't build your house below sea level, and require a education, notice it was mostly un educated that lacked money to evacuate.

"bigamps" <bigamps@even.louder.net> wrote in message news:Uo2Se.30$am.19@news01.roc.ny...
> Christopher Cox wrote:
> ...
>> PS, what is your country doing to help with our existing crisis?
>
> They're trying but the incompetence of the Bush administration...
> http://storiesinamerica.dailykos.com/storyonly/2005/8/31/235829/261

368. Re: note to rec.radio.amateur.space readers

Newsgroup: rec.radio.amateur.space
Date: 2005-09-05 13:49:23 UTC
From: Christopher Cox <chrisTOPHERcOX@coboxincORPOATED.comERCIAL>
Message-ID: <D1YSe.71791$2Q3.41000@tornado.ohiordc.rr.com>
Source record: 1932

Hello Tony,

Thanks for your reply.

And thanks to your country men coming in to assist.

Other than Cuba and Venezuela, the press here was not listing any of the
MANY countries trying to provide aid, till today.

As I am getting information from the ground around the area, the problem
seems to be fuel. Aid arriving is captured because there is no gas to
get back out. The infrastructure is broken in not providing logistical
help to the aid providers.

Just information for those going in, bring enough fuel to get back out
with the precious cargo you will be coming back out with.

I would think MIDCARS would be a good source for updates to this situation.

Warmest Regards,

Chris

Tony VE6MVP wrote:
> On Fri, 02 Sep 2005 19:26:35 GMT, Christopher Cox
> <chrisTOPHERcOX@coboxincORPOATED.comERCIAL> wrote:
>
>
>>This means you are not being logical within your own argument.
>>
>>Your motives are now in question.
>>
>>Sorry, but you will have to try harder next time, which I am reasonably
>>confident you will (try agian).
>
>
> That guy is an idiot.
>
>
>>PS, what is your country doing to help with our existing crisis? I know
>>its a bit early, but we have a real mess on our hands.
>
>
> Vancouver's Urban Search and Rescue Team is currently in Louisiana to
> assist in the search and rescue efforts in the areas of the state
> ravaged by Hurricane Katrina. The team was deployed on August 31 and
> is working with the Louisiana State Troopers and the U.S. National

> Guard.
> http://www.city.vancouver.bc.ca/usar/
>
> Canadian warships to sail to Louisiana
>
> Three Canadian warships, a coast guard vessel and three Sea King
> helicopters will be sent to Louisiana on Tuesday with relief supplies
> for the U.S. Gulf Coast.
>
> http://www.cbc.ca/story/canada/national/2005/09/02/Canadian_ships_to_louisiana20050902.h
tml
>
> Tony

369. ANS-247 AMSAT Weekly News Bulletin

Newsgroup: rec.radio.amateur.space
Date: 2005-09-05 19:53:56 UTC
From: JoAnne Maenpaa <wb9jej_no-spam@earthlink.net>
Message-ID: <on1Te.7475$9i4.2317@newsread2.news.atl.earthlink.net>
Source record: 1933

AMSAT NEWS SERVICE
ANS-247

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:

* Symposium News from AMSAT President
* Katrina Assistance
* ARISS Status August 29, 2005
* SSETI Express - Four Weeks Until Lift-Off
* PCSAT2 Mode Change
* North Texas Balloon Project Launch #14

SB SAT @ AMSAT $ANS-247.01
Symposium News from AMSAT President

AMSAT News Service Bulletin 247.01
From AMSAT HQ SILVER SPRING, MD.
September 4, 2005
To All RADIO AMATEURS
BID: $ANS-247.01

I received many panicked phone calls and e-mails today regarding the upcoming AMSAT Annual meeting, which also includes a Board of Directors meeting before the Symposium and IARU and Eagle Team meetings afterwards. Some of you have tried to call the hotel without success. Others have realized that their decision to fly to New Orleans and drive was flawed as the airport is under water only to find the airlines gouging you with high fees to change a "non-refundable ticket" that they can't honor anyway.

The hotel is 100 miles West of New Orleans and therefore was spared the brunt of the storm and the resultant devastation. However, refugees are filling up hotels up to 300 miles away and many will not be returning any time soon. I fear that our Symposium may be doomed but I do not know for sure.

Over the next several days AMSAT officials will be evaluating the situation in Lafayette LA and will be considering alternatives. We have already had

one offer to try to host the Symposium in Dayton Ohio. Moving the symposium and associated meetings at this late date would be a Herculean task and may cost everyone significant extra air fare fees. The airlines have added major fuel cost surcharges and are sticking with the extra fees for exchanging tickets.

Please do not change or cash in tickets yet. The hotel is no longer accepting any reservations, even at the national 800 number.

If there are any other volunteers willing to try to host this event with no time to prepare and thousands of details to manage please contact our VP of Marketing and User Services, Barry Baines, WD4ASW at wd4asw@amsat.org or AMSAT's Manager, Martha Saragovitz at martha@amsat.org.

Remember, we don't know for sure that we must change anything so wait until there is a final announcement before making any changes.

Rick Hambly, W2GPS
AMSAT President

[ANS thanks Rick, W2GPS for the above information]

/EX

SB SAT @ AMSAT $ANS-247.02
Katrina Assistance

AMSAT News Service Bulletin 247.02
From AMSAT HQ SILVER SPRING, MD.
September 4, 2005
To All RADIO AMATEURS
BID: $ANS-247.02

We are all concerned about the people in the path of Katrina's destruction. Many of us have friends or family in the area, others have friends and co-workers who have friends or family in the area. At this time, information into and out of the affected areas is sporadic. Our fellow hams are overloaded with requests for food, water and rescue.

If you need to locate someone visit: http://www.satern.org/ and complete the health and welfare information request. This group is also on the air on 14.265. SATERN has the ability to hold the messages and to handle delivery when information can get to the affected area. Don't forget to provide the last known address of the person you are looking for as well as the area they may have evacuated to.

Here's how YOU can help now. Keep frequencies with any kind of relief traffic clear -- that means listen only, don't be a policeman. Offer to handle the internet input or the HF traffic to SATERN from your area for those without internet access or HF privileges. Try a text message via cell phone. Have patience.

If you want to go to the area to assist with communications or other activities, contact the Red Cross or other relief agencies FIRST. They have

required training courses before you can be deployed so do not be surprised if you are told no. Donate money. Most importantly, DO NOT ATTEMPT TO TRAVEL TO THE AREA ON YOUR OWN.

[ANS thanks Sherri, W4STB for the above information]

/EX

SB SAT @ AMSAT $ANS-247.03
ARISS Status August 29, 2005

AMSAT News Service Bulletin 247.03
From AMSAT HQ SILVER SPRING, MD.
September 4, 2005
To All RADIO AMATEURS
BID: $ANS-247.03

1. Sapporo Contact Successful

The Sapporo Junior Amateur Radio Club in Sapporo, Kokkaido, Japan experienced a successful contact with the ISS on Monday, August 22. Thirteen students asked 19 questions of John Phillips, KE5DRY, as high school student Jun Maeda, JL8AQH, manned the radio. Approximately fifty people attended the event, which was covered by three newspapers and two television stations.

2. ARISS International Meeting

The monthly ARISS International Teleconference was held on Tuesday, August 23. Among the items discussed were the SuitSat project, the SSTV status, PCSAT2, and the Exploration Initiative. The next ARISS International Meeting will be held on September 20.

3. ARRL Article on ARISS Delegate Rosalie White

On August 22, ARRL ran a web story on ARRL Field and Educational Services Manager, Rosalie White. Rosalie has returned to her home state of Indiana to help with family issues, but she will continue to work with ARRL and ARISS. The story, "Rosalie White, K1STO, departs ARRL Headquarters, keeps connection," may be found at: http://www.arrl.org/

4. SuitSat and SSTV Shipped

Sergey Samburov, RV3DR, reports that the SuitSat hardware and the SSTV system have been packed and shipped to Baikonur Cosmodrome to be included on the next Progress flight, and that the crew has been trained in SuitSat assembly and radio operations. Progress 19P is scheduled to launch on September 8.

5. Crew Debrief

On Monday, August 22, the ARISS-U.S. team spoke with Andy Thomas, KD5CHF, about the general contacts he made using the ARISS radio system while on the ISS. Thomas had not been scheduled for any school contacts due the busy schedule of the STS-114 astronauts, but he did make time for a few general contacts over Australia and New Zealand, causing much excitement among the

radio operators there.

6. ARISS Member Interviewed for Documentary

ARISS-Europe member, Carlos Eavis, G0AKI, was interviewed for the BBC Radio 1 documentary, "Radio Anyone." An article, "BBC Radio 1 documentary 'Radio Anyone' now on the web," was posted to the web and provides a link to the audio. To listen to the interview, go to:
http://www.southgatearc.org/news/aug2005/radio_anyone_audio.htm

7. ARRL Article on Arizona Contact

Students at D.W. Higgins Institute in Tempe, Arizona spoke with astronaut John Phillips, KE5DRY, on Wednesday, August 17. ARRL ran a web story on the contact, entitled, "Space QSO Provides Arizona Youngsters Something to Remember." See:
http://www.arrl.org/news/stories/2005/08/26/3/?nc=1

8. Cosmonaut Makes General Contacts

Sergei Krikalev, U5MIR, made several general contacts over the weekend. Stations in the U.S., Kuwait, Malaysia, and Australia reported speaking to the cosmonaut on Saturday, August 27, with some sending wishes for a happy birthday, as Krikalev turned 47.

[ANS thanks Carol, KB3LKI for the above information]

/EX

SB SAT @ AMSAT $ANS-247.04
SSETI Express - Four Weeks Until Lift-Off

AMSAT News Service Bulletin 247.04
From AMSAT HQ SILVER SPRING, MD.
September 4, 2005
To All RADIO AMATEURS
BID: $ANS-247.04

The launch date of September 27th and a lift-off time of 06:52:26 UTC now looks pretty certain for the Cosmos 3 rocket carrying SSETI Express with its three cubesat passengers and four other satellites into orbit.

Updated pre-launch keps will be made available in a few days time and there

are a number of web pages being developed to enable amateurs to locate SSETI Express, receive and download the telemetry and to forward it to Mission Control for their evaluation. Later in the mission it will also be possible for amateurs to transmit so-called "friendly" commands to request particular telemetry or thumbnail pictures.

The SSETI team and ESA - The European Space Agency, are very keen to recruit as many radio amateurs as possible around the world to capture the telemetry. Our worldwide "virtual groundstation network" is a unique facility which we can use to our benefit as well as theirs. By showing how well our network can substitute for their expensive professional one, we

will really encourage them to include amateur transponder systems in their future missions.

ESA will be offering a very significant prize for the amateur who sends them the largest amount of telemetry during the mission and is also offering a unique "I heard it first" T shirt to the station that sends them the first report. This is actually likely to be one of the three Stations that we hope to having listening for SSETI Express in Antarctica - an ideal item of clothing for their forthcoming winter season!

The main mission site is being finalised and can already be accessed at www.sseti.net -- click on the "express mission operation web site" link. This has full details of the mission, the software, present orbital position and a host of other information.

There is also a Mission Control web site at:
http://www.express.space.aau.dk/?language=en&page=home
which will include a web cam of the control room and eventually the antennas and radio equipment.

AMSAT-UK will shortly be publishing the first edition of the SSETI Express Handbook which has been kindly edited by Richard, G3RWL. This will be available as a downloadable PDF file or, for a small fee, in a full colour printed version by post.

The SSETI Express launch campaign team will be setting off for Russia on Sept. 5th and will try to keep a good flow of up-to-date information flowing from the launch site.

Meanwhile there are two possibilities for joining the excitement of the Sept. 27th launch:

On ASTRA 1G which has coverage of most of Europe. The launch will be broadcast via ESA Television on ASTRA 1G at 19.2 degrees east:

Transponder: 1.108
Reception Frequency: 12551.50 mHz
Polarization: Vertical
Symbol Rate: 22Msymb/s
FEC: 5/6
TS_ID: 1108
ON_ID: 1
Service Name: ESA
Service provider: ASTRA
Service_ID: 12140
TXT: none

This is always on and will transmit an ESA logo starting three days before the launch. The programme is expected to run for approximately 30 mins and will include the launch sequence live from the Plesetsk launch site. The final programme timing will be announced by ESA nearer to the time.

On the Internet - World Wide Web

The ESA launch programme on ASTRA 1G will also be available as a web stream on the internet. The Home Counties Amateur Television Club operate an amateur television repeater (GB3HV) at High Wycombe in the UK and the output of this repeater is usually streamed onto the internet. They have kindly agreed to make this web stream service available to us for the launch period.

The web stream runs at about 210 Kbits/sec so a broadband internet connection will be required for a reliable relay. To access this web stream you need to have Windows Media Player and connect to mms://wm9.btrichmedia.com/hcatv. This service should be capable of serving a large number of users without difficulty.

This web stream operates on a 24/7 basis so it can be checked at anytime. Before the launch it may be displaying a variety of test cards, amateurs or other pictures. The display may take up to 30 seconds to appear and during the second half of every hour (from 30 mins to 59 mins after the hour) it will display a blank screen unless GB3HV is actually in use.

So we are nearly there! Please keep your fingers crossed for just a little longer so we can have a successful launch campaign.

More information will be relayed over the next few weeks but if the web sites listed do not give you the answers that you need about anything to do with SSETI Express please get in touch.

[ANS thanks Graham, G3VZV for the above information]

/EX

SB SAT @ AMSAT $ANS-247.05
PCSAT2 Mode Change

AMSAT News Service Bulletin 247.05
From AMSAT HQ SILVER SPRING, MD.
September 4, 2005
To All RADIO AMATEURS
BID: $ANS-247.05

The PCSAT2 side-A system has been operated for 4 weeks in PSK-31 mode, and will now be changed from PSK-31 mode to UI/APRS Packet digipeater mode.

See: http://www.ew.usna.edu/~bruninga/pec/pc2ops.html

In this mode, the uplink is 145.825 and downlink is 435.275 +/- 10 kHz doppler to avoid any interference with the 145.800 ARISS operations. The system is 1200 baud with the callsign of PCSAT2 and alias of ARISS, so the same setting as you use for normal ARISS packet, should work here too if you use the ARISS alias.

Again, refer to the PCSAT2 operations page and the User Service Agreement for this mode. Specifically, unattended beacons are not authorized. The digipeater is for human communications, not blind beacons.

See: http://www.ew.usna.edu/~bruninga/pec/useragreemt.txt

[ANS thanks Bob, WB4APR for the above information]

/EX

SB SAT @ AMSAT $ANS-247.06
North Texas Balloon Project Launch #14

AMSAT News Service Bulletin 247.06
From AMSAT HQ SILVER SPRING, MD.
September 4, 2005
To All RADIO AMATEURS
BID: $ANS-247.06

The North Texas Balloon Project will launch NTBP #14, named "Rapidfire," on Sept. 3, 2005 from the Hillsboro, TX, Airport. This flight is essentially a re-flight of NTBP #12, flown on 20 August 2005, to counter the actions of "Dr. Murphy" enjoyed on NTBP #12. It will have on board a cross band voice repeater, voice reports of inside and outside temperatures plus time (courtesy of the Fannin County ARC, Bonham, TX), APRS package location, and a DF Beacon. Liftoff time will be moved to approximately 8:15 AM CDT. A Special Event Callsign, N5B, will be used for this event. This time there will be a Special Event operation on 14.282 mHz during the event. There will be an HF Launch Information Net on 7260 +/-10 kHz. Other frequencies, and information for NTBP #14, are the same as the information for NTBP #12 posted at www.ntbp.org. Check the Web Page frequently for status and come join the fun!

Frequencies:

Crossband Repeater: Uplink: 445.800 mHz, Downlink: 147.560 mHz
APRS Location Information: 144.390 mHz
Time and Temperature Package: 146.56 mHz
Shuttle Package DF Beacon: 145.56 mHz
Launch Information Net: 7260 +/- 10 kHz
N5B Special Event Check-In: 14.282 mHz

[ANS thanks Keith, W5IU for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Al Marote, WA1LBG
wa1lbg at amsat dot org

370. WSR-247 AMSAT Weekly Satellite Report

Newsgroup: rec.radio.amateur.space
Date: 2005-09-05 19:54:54 UTC
From: JoAnne Maenpaa <wb9jej_no-spam@earthlink.net>
Message-ID: <io1Te.7476$9i4.4368@newsread2.news.atl.earthlink.net>
Source record: 1934

```
This report is organized into 4 parts.
Part 1 - operational analog amateur satellites.
Part 2 - operational digital amateur satellites.
Part 3 - non - operational satellites
Part 4 - proposed satellites

SB SAT @ AMSAT <W8ISS $ANS-247.S1
WSR 247 Part 1 09/04/2005

AMSAT NEWS SERVICE BULLETIN 247.S1 FROM AMSAT HQ
SILVER SPRING, MD, SEPTEMBER 04, 2005
TO ALL RADIO AMATEURS
BID: $ANS-247.S1

VO-52 HAMSAT
Catalog Number: 28650
Launch Date: May 05,2005

Status: On orbit
Current Mode: U/V

Proposed frequencies:
-------------------
Indian transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacom : 145.940MHz continue carier signal

Dutch transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacon : 145.860MHz 12WPM with CW message
[07242005]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - OFF
FM REPEATER - V/U

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
Analog voice uplink: 145.880 MHZ FM
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone
```

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

Current scheduled operating modes:

Due to the on going Huricane Katrina Relief Efforts in the Gulf Coast
States,
AO-51 will continue in the default mode V/U with 9k6 Digital, V/U, PBP BBS
mode. Updated information will be posted as soon as any changes are made.

[ANS-WSR thanks Bill, VE7WFG for the above information]
[0904005]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz (67.0 Hz PL tone) (See below for operating
procedures)
Downlink: 436.795 MHz

There have been unconfirmed reports on the amsat-bb remailer that SO-50 has
shifted downlink frequency as much as 5khz up. This both from Europe.

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The
order of operation is thus: (allow for Doppler as necessary)

1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm
the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT
the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window
will reset the 10 minute timer.
[09122004]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplink: 145.850 145.870 145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

John, N4QWL reports on July 16th, 2005:

Last evening I had a AOS to LOS qso with WI2W. FO-29 came up at 01:17z here in FM07 and I found WI2W and we chatted until 01:33z. The satellite was at 2 degrees elevation when I finally heard him start to crackle a bit. What a great QSO! To think that I watched this bird launch back in 1996 and it is still working so well is a real thrill. I believe I still have the video. I might just look for it and watch it again. Boy do I love this satellite stuff! Look for you all up there.

Please send the reception reports to lab2 'at' jarl.or.jp.
Please use the subject line: 'FO-29 reception report'.

Mineo, JE9PEL, has an FO-29 satellite telemetry analysis program that will automatically analyze all digital telemetry from the satellite (such as current, voltage and temperature). FO29CWTE is available at:
http://www.ne.jp/asahi/hamradio/je9pel/
[ANS-WSR wishes to thanks John, N4QWL for this week's report]
[07172005]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

The latest information on AO-27 from control operator Michael Wyrick, N3UC (former N4USI), can be found at:
http://www.ao27.org

An AO-27 question-and-answer page is available on the AMSAT-NA web site, with updates by Ray, W2RS. The URL is:
http://www.amsat.org/amsat/intro/ao27faq.html

[ANS-WSR thanks John, K6YK, for this week's AO-27 report]
[08292004]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Semi-operational in sunlight.
Return to active status: June 21,2002

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B

Downlink: 29.400 to 29.500 MHz CW/USB Mode A
145.975 to 145.925 MHz CW/USB Mode B
Beacon: 29.502 MHz, 145.972 MHz, 435.1 MHz, 2304.1 MHz

Emily, W0EEC has created a website to allow the users of AO-7 to record
contacts, observations and use of the satellite more effectively at:
http://www.emilyshouse.com/experthams/ao7/main.php
This includes the ability to log contacts.

Tim, K3TZ has written a program to decode AO-07 telemetry.
The program can be downloaded at:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

For more AO-7 info:
http://www.amsat.org/amsat/sats/n7hpr/ao7.html
[11142004]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: U/V CROSS-BAND REPEATER
Digipeater: Inactive

The current Expedition 11 crew is:
Commander Sergei Krikalev
Flight Engineer John Phillips

Worldwide packet uplink: 145.990 MHz FM
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM
Doppler Shift is 10 KHz

Russian callsigns: RS0ISS, RZ3DZR
USA callsign: NA1SS
Packet station mailbox callsign: RS0ISS-11
Packet station keyboard callsign: RS0ISS-3
Digipeater callsign: ARISS

This off the ARISS webpage:
http://www.rac.ca/ariss/oindex.htm#New%20ARISS%20Operations :
The ARISS program is pleased to announce that the amateur radio equipment
aboard the International Space Station is now operating in cross-band repeat
mode. We realize that many of you will miss the packet-operating mode. How-
ever, cross-band repeat allows further experimentation of the ISS amateur
radio system

The downlink for this operating mode remains the same, so listen for the station on 145.80 MHz. The new uplink frequency is 437.80 MHz. All frequencies
are subject to Doppler shifting. For further information on working satellites
and adjusting for Doppler shift, please review Emily Clark's (W0EEC) excellent
presentation on AMSAT's website:
http://www.amsat.org/amsat-new/information/faqs/Intro_sats.pdf

The ISS daily crew schedule can be found at:
http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is NOT
translated from Russian and posted.

More information is available at:
http://www.rac.ca/ariss
http://spaceflight.nasa.gov/station/reference/radio/
http://www.marexmg.org/fileshtml/unprotopage.html
http://www.issfanclub.com
http://oscar.dcarr.org/
[07242005]
NNNN
/EX

SB SAT @ AMSAT <W8ISS $ANS-247.S2
WSR 247 Part 2 09/04/2005

AMSAT NEWS SERVICE BULLETIN 247.S2 FROM AMSAT HQ
SILVER SPRING, MD, SEPTEMBER 04, 2005
TO ALL RADIO AMATEURS
BID: $ANS-247.S2

PCSAT2 ?0-??
Catalog Number:
Launch Date: August 1, 2005

Status: Operational

PCSAT2 was installed on the exterior of the International Space Station and was activated on August 3, 2005.

PCSAT2 CAPABILITIES: PCSAT2 is attached to the ISS and so its operations must be in cooperation with the ARISS communications suite to minimize any mutual interference and to coordinate activities. Here are the capabilities of the PCSAT2 and ARISS payloads:

PCSAT SYSTEM A:

435.275 PCSAT2 DOWNLINK 1200 baud packet with uplink on 145.825
435.275 PCSAT2 DOWNLINK Occasional user PSK-31 continuous downlink
145.825 PCSAT2 DOWNLINK 1200 baud packet
PCSAT SYSTEM B:

437.975 PCSAT2 DOWNLINK periodic Solar Cell data and PCSAT2 telemetry at
9600 baud
437.975 PCSAT2 DOWNLINK TNC-B command downlink at 1200 baud
437.975 PCSAT2 DOWNLINK User Voice Repeater with VHF uplink
437.975 PCSAT2 DOWNLINK Packet digipeater with VHF uplink

It looks like PCSAT2 can best contribute at this time by operating in
PSK-31 mode for the near future. This is a very exciting new transponder
mode which solves the congestion problem on FM repeaters by letting
multiple stations all communicate at the same time.

PSK-31 users are welcome to try out the new PCSAT2 PSK-31 transponder
on ISS with an uplink on 29.402 ± 1 KHz and downlink on 435.275 ±
Doppler using FM.

The FM downlink lets everyone operate full duplex and everyone to see
the same view of the passband as everyone else. THus you can see exactly
what your signal looks like to everyone else.

Help Wanted:

Here is your chance to become a viable part of the Amateur
Satellite Community.

We are looking for a volunteer satellite packet
station in Hawaii that is interested in helping with
telemetry and sat-gating of PCSAT2 and
ARISS packets. Requirements are:

1) General familiarity with packet
2) TNC connected to a cross band radio that
can RX on UHF and TX on VHF.
3) modest UHF beam and rotator system.

Contact WB4APR for more information.

Packets seen from PCSAT2 can be reviewed at:
http://www.findu.com/cgi-bin/pcsat2.cgi

A screen shot of both the 9600 bps and 1200 bps decoded data
as seen by Simon, 9W2QC, can be seen at:
http://www.9w2qc.net/pcsat2/

More information on PCSAT2 can be found at:
http://web.usna.navy.mil/~bruninga/pcsat2.html

[ANS-WSR thanks Bob, WB4APR and the U.S. Naval Academy Satellite Lab for
the aboveinformation.]

[08282005}
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - OFF
FM REPEATER - V/U HIGH POWER

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
Analog voice uplink: 145.880 MHz FM
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

Current scheduled operating modes:

Due to the on going Huricane Katrina Relief Efforts in the Gulf Coast
States,
AO-51 will continue in the default mode V/U with 9k6 Digital, V/U, PBP BBS
mode. Updated information will be posted as soon as any changes are made.

[ANS-WSR thanks Bill, VE7WFG for the above information]
[0904005]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Non-Operational?????

Uplink/downlink: 145.827 MHz 1200 baud AX.25 AFSK via W3ADO-1
Aux/Uplink: 435.250 MHz 9600 baud via PCSAT-2 (off)
APRS Downlink: 144.390 MHz (Region 2)

PCSat is a 1200-baud APRS digipeater designed for use by stations using
hand-held or mobile transceivers. Downlinks feed a central web site at:
http://pcsat.aprs.org

The APRS-equipped PCSat was built by midshipmen from the U.S. Naval Academy
under the guidance of Bob Bruninga, WB4APR.
[07242005]
=====
CUTE-1
Catalog number: 27844
Launched: June 30,2003

Status: Operational

Uplink: ?
Downlink: 436.8375 CW
437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)

Cliff, K7RR reports:
In the latest Weekly Satellite Report, CUTE 1, #27844 is listed as
OPERATIONAL?
Indeed it is very operational as a CUBESAT sending CW telemetry on
436.8345 MHz. At the July 7 2005, 23:45:20 pass over the Western USA:
CUTE 1 6B A4 xx 7F D7 66A8 4702 FF FF7C 65
CUTE 1 6C A6 59 80 D9 66A8 4702 FF FE7C B6

The June 30th KEPS were within ten seconds of AOS and LOS. It is an very
good object to practice tracking as the orbit and transmitter power are
similar to proposed CUBESATS awaiting launch this December. As a check for
Doppler correction, the lack of change in tone is an excellent indicator.

CUTE 1 is a Japanese (Tokyo Institute of Technology) one kilogram
nanosatellite that was launched by a Rokot rocket from Plesetsk at
14:15 UT on 30 June 2003. It carries a 100 mW beacon at 436.8375 MHz.
Initial orbital parameters were period 101.4 min, apogee 831 km, perigee
819 km, and inclination 98.7?.

For further info about CUTE-1 goto:
http://lss.mes.titech.ac.jp/ssp/cubesat/operation/Schedule_e.html

[ANS WSR wishes to thank Cliff, K7RR, for this week's information]
[07242005]
=====
GO-32 TECHSAT-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
(435.325 n/a - temperature problems)
Uplinks: 145.850, 145.890, 145.930 FM
1269.700, 1269.800, 1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[03132005]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink: 145.850 or 145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz
Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[05152005]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for
APRS users.

Uplink: 145.90 145.92 145.94 145.96 MHz FM
(using 1200-baud Manchester FSK)
Downlink: 437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon: 2401.1428 MHz
Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

A WOD collection of current graphics along with general information
and telemetry samples can be found at:
http://www.telecable.es/personales/ea1bcu
[05092004]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational?

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK).
approx. 10 days ON, 10 days OFF
Mode-S Beacon: 2401.500 MHz. ... OFF
UHFBeacon: 435.025 MHz. ... OFF

OSCAR-11 is back! I received the good news, on Saturday morning, while
at the AMSAT-UK Colloquium. This was entirely unexpected! On Sunday
morning Bob G4VRC played me a recording of an early morning pass
received that day.

During the period 21 July to 14 August 2005 consistent signals have been
heard from 30 July to 08 August. Signals seem to be weaker than usual,
confirmed by the many reports received. However,since I last heard the
satellite on 30 April, I've reinstalled my antennas , which makes
comparisons difficult.

Many thanks for all the recent reports of OSCAR-11 including those from
KU7Z (who heard it first), KB2M, VK6XH, HK7MKE, KA2UPW, JE9PEL, G1OCN,
HB9SKA and G8OQW.

All the analogue telemetry channels, 0 to 59 are zero, ie they have failed. The status channels 60 to 67 are still working. One bit in channel 62, DSR mode, has changed from WRITE to READ. DSR is the Digital Store & Readout experiment. This could be significant if the experiment is still drawing current, but the other status bit indicates that it is switched OFF.

The on-board clock is now showing a very large error. It has lost approximately 19 days since 30 April. During the recent data collection period, the clock error has been changing at a decreasing rate. The size of the clock error and the rate at which it is changing is similar to the duration of the solar eclipse periods. This suggests that the clock might have been switching OFF during eclipses.

The eclipses have now ended, and the satellite should be in continuous sunlight for the remainder of this year, and well into next year. This should help the satellite to continue transmitting, although continuous sunlight can cause problems due to excessive temperatures.

If the watchdog timer is still operating on a 20 day cycle, ie. approximately ten days ON followed by 10 days OFF, then the VHF beacon should resume transmissions around 18 August.

The Beacon frequencies are -

VHF 145.826 MHz. AFSK FM ASCII Telemetry

UHF 435.025 MHz. OFF

S-band 2401.5 MHz. OFF

Listeners to OSCAR-11 may be interested in visiting my website which contains an archive of news & telemetry data. It also contains details about using a soundcard or hardware demodulators for data capture. There is software for capturing data, and decoding ASCII telemetry. The URL is www.users.zetnet.co.uk/clivew/

If you place this bulletin on a terrestrial packet network, please use the bulletin identifier $BID:U2RPT112.CWV, to prevent duplication.

[ANS-WSR thanks Clive, G3CWV, for the above information]

More information on UO-11 OSCAR-11 can be found at:
http://www.users.zetnet.co.uk/clivew/

MPEG3 files can be found here at Mineo, JE9PEL website:
http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm

[08212005]
NNNN
/EX

SB SAT @ AMSAT <W8ISS $ANS-247.S3
WSR 247 Part 3 09/04/2005

AMSAT NEWS SERVICE BULLETIN 247.S3 FROM AMSAT HQ
SILVER SPRING, MD, SEPTEMBER 04, 2005
TO ALL RADIO AMATEURS
BID: $ANS-247.S3

THE FOLLOWING ARE IN ORBIT BUT ARE
NON-OPERATIONAL AT THIS TIME:

POSAT-1 PO-28
Catalog Number: 22829
Launched : September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 435.250 MHz
435.275 MHz

Uplink: 145.925 MHz
145.975 MHz

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

PO-28 (POSAT-1), Portugal's first satellite, launched 12 years ago, will be turned over to Amateur Radio use in the very near future. That was the word July 30 from AMSAT-UK Secretary Jim Heck, G3WGM, during the AMSAT-UK International Space Colloquium in Guildford, England.

Launched September 25, 1993, the satellite operated as a packet store-and-forward BBS (9600 baud FM FSK) on Amateur Radio frequencies for several weeks in early 1994. Over the years, PO-28's primary usage has been commercial, although plans have called for eventually shifting its operation to ham radio use. G3WGM reports that following lengthy negotiations it has been agreed that the satellite can be switched permanently to amateur frequencies. The changeover is expected to take a couple of weeks.

The Portuguese satellite was built at the University of Surrey as part of a collaborative satellite technology program that involved industry and academe. Uplink frequencies will be 145.925 and 145.975 MHz. Downlink frequencies will be 435.250 and 435.275 MHz. More information on PO-28 is on the AMSAT Web site http://www.amsat.org/amsat/sats/n7hpr/po28.html.

Uplink Frequencies: 145.925 and 145.975 MHz
Downlink Frequencies: 435.250 and 435.275 MHz

Orbit: 822 x 800 km, 98.6 deg inclined, sun-synchronous.

Transponder capabilities include FM repeater and 38k4 data. If you want to hear how loud this satellite is, listen on 429.950 until the change back to amateur radio service.

Keplerian elements for PO-28 are not currently contained in the AMSAT keps bulletins, but can be found at Celestrak in amateur.txt using the name "POSAT". Users of Space Track should query the NORAD Satellite ID number 22829. The name listed by Space Track is "EYESAT A".

More information of POSAT-1 can be found at:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
http://www.amsat.org/amsat/sats/n7hpr/po28.html
[ANS-WSR wishes to thanks Trevor, M5AKA and Jim, G3WGM, for this week's information.]
[08072005]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon: 145.810 MHz (unmodulated carrier)

AO-10 has been locked into a Mode-B, 70-cm uplink and
2-meter downlink for several years.

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Non-operational

Uplink: 145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink: 435.812 MHz SSB
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Alberto E. Zagni - I2KBD reports on 02/13/05
The spacecraft is in MBL (safe mode) and is trasmitting just 6 channels of telemetry. Temperatures and voltage are nominal, but there seems to be a problem with the onboard receiver, refusing to accept commands. The spacecraft was launched in 1993, thus nearing 12 years in orbit...

Best regards
Alberto E. Zagni - I2KBD
ITAMSAT Mission Director

More information of IO-26 can be found at:

http://joshua.micronet.it/english/itamsat/itamsathome.html
http://www.amsat.org/amsat/sats/n7hpr/io26.html
www.itamsat.org

[02132005]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089

Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon: 29.408 MHz
Robot: 29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB
Beacon: 145.860 MHz
Robot: 145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB
Beacon: 29.352 MHz (intermittent)

SSB meeting frequency: 29.380 MHz (unofficial)

John, KD6PAG reports on June 16, 2004 to ANS:
RS-15 beacon seemed to be back in the mode where it's a tone about 5 seconds
off and then 5 seconds on this morning.

ANS is looking for more confirmations of RS-15 coming back.

[ANS thanks John, KD6PAG for RS-15 information]
[06202004]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplink: 145.84 145.86 145.88 145.90 MHz FM
(using 1200-baud Manchester FSK)
CW downlink: 437.125 MHz
Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)
Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM
Broadcast Callsign: HLO1-11
BBS: HLO1-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a
non-operational status.
[05092004]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM (9600-baud FSK)
Downlink: 436.500 MHz FM
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink frequency (listed on the PanSat web site) 436.500 MHz

The satellite is not available for general uplink transmissions.

The Naval Postgraduate School developed PanSat. At the time of
launch, PanSat spread-spectrum digital transponders were to
be available to Amateur Radio operators along with software to utilize
this technology.

The satellite is still operating, however, the spread spectrum packet
radio portion never took place. The spacecraft is now beyond it's
initial 2-year mission life, but telemetry records are still being
downloaded.

For more information, visit the official PanSat web site at:
http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS has no further information]
[05232004]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlink: 437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA
web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplink V-band 145.840 - 145.990 MHz CW/LSB
U-band 435.550 - 435.800 MHz CW/LSB
L1-band 1269.250 - 1269.500 MHz CW/LSB
L2-band 1268.325 - 1268.575 MHz CW/LSB
S1-band 2400.350 - 2400.600 MHz CW/LSB
Downlink: S2-band 2401.225 - 2401.475 MHz CW/USB
K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon: 2401.323, 24,048.035
[05232004]

SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational
Downlink: 437.075 MHz
Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz
Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
callsign KE6QMD, as per the user service agreement located at the following
URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Semi-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

AO-49 (SAFIR-M) is a German amateur radio payload onboard the small German
scientific satellite "RUBIN-2".

AO-49 was built by the German amateur radio association "AATiS
e.V." (German
acronym for "Arbeitskreis Amateurfunk und Telekommunikation in der Schule",
which means: 'working group for amateur radio anand telecommunications in
schools'). AO-49 is designed as a "store and broadcast" system for APRS
based messages, dedicated for the use of schools in combination with the
existing WX-Net and planned buoy experiments in Germany.

No transmissions detected since the 1st of February 2003! It appears
AO-49 is not properly aligned to illuminate the solar panels. This
should end soon. Due to its orbit, AO-49 will be in a phase without
eclipses until 13Feb03.

Martin DG8UAU has written a small software program "SAFIR-M Decoder" to
allow decoding of the received DATA0 frames. It is available at:
http://amend.gmxhome.de in the section Aktuelles.

Details on AO-49 (SAFIR-M) can be found at:
http://amend.gmxhome.de

Information about AATiS e.V. is available at:
http://www.aatis.de
[05092004]
NNNN
/EX

SB SAT @ AMSAT <W8ISS $ANS-247.S4
WSR 247 Part 4 09/04/2005

AMSAT NEWS SERVICE BULLETIN 247.S4 FROM AMSAT HQ
SILVER SPRING, MD, SEPTEMBER 04,2005
TO ALL RADIO AMATEURS
BID: $ANS-247.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE
PROPOSED FOR LAUNCH AT THIS TIME:

UCISAT ?O-??
Catalog number:
Proposed Launch Date: October 31, 2005

Status: Under Construction

Downlink: Submission in Progress
Uplink: Submission in Progress
Callsign: Submission in Progress

This from Matt Bennett, KF6RTB, UCISAT Communications Team Member:

Our website is www.ucisat.net .This is a new website, however, and doesn't
have the "Status" section active yet. Because of the growing interest in our
project, I'll push our webmaster to create updates (hopefully) on a week-to-
week basis. For now, the current status of the mission is as follows:

-Expected Launch Date: October 31st, 2005
-Frequency Allocation: Submission in Progress
-Construction Status: Sub-Assembly
[WSR to thank Matt Bennett, KF6RTB, for this week's report.]
[01302005]
=====
SSETI ?O-??
Catalog Number:
Proposed Launch Date: LATE 2005

Status: AWAITING LAUNCH

Graham, G3VZV reports:
We have now been advised that the revised launch date for SSETI Express and
the other satellites on the DMC3 COSMOS launch has been confirmed as
September
27th - so please keep those fingers crossed!

SpaceDaily has a report about SSETI at:
http://www.spacedaily.com/news/internet-04zzzu.html

You can find more info about SSETI at:
http://sseti.gte.tuwien.ac.at/WSW4/

Looking at the website for the SSETI Express webcam
http://sseti.gte.tuwien.ac.at/WSW4/webcam.htm

[ANS thanks Graham, G3VZV for the above information]
[07312005]
=====
PHASE 3E ?O-??
Catalog Number:
Proposed Launch Date: Early 2006

Status: Under Construction

William Leijenaar, PE1RAH reports on July 16th, 2005:

Hi AMSATs,

I always like to inform the AMSATs public about my P3e work, but
unfortunatly due to
some reasons there was not much time and nothing much to say...

However, now I am happy to announce that the my MODE-UV transponder design
for P3e is ready at the P3e integration place in Marburg (Germany). About 4
weeks ago I was in Marburg before, where the transponder has been checked.
Unfortunatly some unsure things were found in the design. The unsure things
were about long term stability after many years in space.

At home in The Netherlands, I changed the design with some minor changes to
have a secure long term stability. Finally I tested the transponder again
and it performed well within the specifications. Again something learned for
future transponder designs :o)

Last Wednesday I drove to AMSAT-DL P3e integrations place in Marburg again, and have my transponder again checked. In the beginning it seemed that the 70cm receiver lost 10dB in sensetivity. After some more measurements we find out that it was due to a bad attenuator we used for protection at the input.

Together with Karl Meinzer we looked for any problems, but so far we could see (without HELAPS) all was okay. In the afternoon I went back home again, this time without the MODE-UV.

Now the MODE-UV will get a new home, the home of P3e... :o)
I hope the transponder will work like its elder sister in AO-10, and you all will enjoy it for many years...

It was lots of work to get it this far, but I know it is for a good purpose...

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/

[ANS-WSR wishes to thank William Leijenaar, PE1RAH for this week's report]
[07172005]
=====
CP1 ?o-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N6CP
Proposed Transmit Frequency: 436.845
[03272005]
=====
CP2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.325
[03272005]
=====
HAUSAT1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: D90HP
Proposed Transmit Frequency: 437.465
[03272005]
=====
ICE Cube 1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: W2CXM
Proposed Transmit Frequency: 437.305
[03272005]

=====
ICE Cube 2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N2VR
Proposed Transmit Frequency: 437.425
[03272005]
=====
ION ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.505
[03272005]
=====
KUTEsat ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: KC0RMW
Proposed Transmit Frequency: 437.385
[03272005]
=====
MEROPE ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: K7MSU-1
Proposed Transmit Frequency: 145.980
[03272005]
=====
nCUBE1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
2407.25
[03272005]
=====
RINCON ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
437.345
[03272005]
=====
SACRED ?O-??

Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SEEDS ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: JQ1YGU
Proposed Transmit Frequency: 437.485
[03272005]
=====
Mea Huaka ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.405
[03272005]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satelite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

371. The shadows are back...

Newsgroup: rec.radio.amateur.space
Date: 2005-09-07 12:02:09 UTC
From: artbellfan <artbellfan8@yahoo.com>
Message-ID: <1126094097.272162.239450@f14g2000cwb.googlegroups.com>
Source record: 1935

Paranormal Website/The Shadows are back!

http://www.shadowpeoplebooks.com

372. Radio Meteor Obs. Bull. August 2005 Perseids

Newsgroup: rec.radio.amateur.space
Date: 2005-09-09 23:13:04 UTC
From: Chris Steyaert <observations@rmob.org>
Message-ID: <sm54i1963me9c2c4pe6phbo4vl2jrn8uar@4ax.com>
Source record: 1936
Cross-posted to: rec.radio.amateur.space,sci.astro.amateur

Radio Meteor Observation Bulletin No. 145 of August 2005 (67 K) is available now as

http://visualrmob.free.fr/rmobtext/rmob0508.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

http://radio.data.free.fr

Chris

373. ANS-254 AMSAT News Service Weekly Bulletins

Newsgroup: rec.radio.amateur.space
Date: 2005-09-11 14:16:00 UTC
From: JoAnne Maenpaa <wb9jej_no-spam@earthlink.net>
Message-ID: <A_WUe.10805$FW1.197@newsread3.news.atl.earthlink.net>
Source record: 1937

AMSAT NEWS SERVICE
ANS-254

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* 2005 AMSAT Symposium is Cancelled
* AMSAT-NA Reschedules Key Meetings
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* Software Updates Available for Satellite Programs
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SB SAT @ AMSAT $ANS-254.01
2005 AMSAT Symposium is Cancelled

AMSAT News Service Bulletin 254.01
From AMSAT HQ SILVER SPRING, MD.
September 11, 2005
To All RADIO AMATEURS
BID: $ANS-254.01

The AMSAT-NA Board of Directors in special session held September 6 via teleconference has made the decision to cancel the 2005 AMSAT Symposium which was scheduled to take place in Lafayette, LA October 7-9.

While Hurricane Katrina spared Lafayette in terms of physical damage, the city is now the home to thousands of evacuees who left the Gulf Coast and are now housed in Lafayette's hotels and other accommodations for the near future.

Over the past week AMSAT-NA has been looking into the possibility of relocating the Symposium to an alternative site. A number of options were explored (such as Baltimore-Washington, Pittsburgh, Cleveland, Cincinnati, Orlando, Tampa, San Francisco, and Tulsa) as several AMSAT

teams investigated if the Symposium could be relocated on short notice. This required finding appropriate hotel facilities and putting local host committees together to coordinate Symposium at each potential location. It became obvious that with less than five weeks before the Symposium was scheduled to take place, there would be insufficient time to make a successful change in location. Altering the Symposium dates was not viewed as practical since many attendees have to schedule their vacation time well in advance and most individuals already have commitments for later weekends.

"We regret that Symposium will not be held this year," says AMSAT-NA President Rick Hambly, W2GPS. "Our thoughts and prayers go out to the victims on the Gulf Coast who are now relocated to Lafayette and surrounding states." Rick went on to note that the Board was concerned that attempting to relocate on such short notice would impact the quality of the Symposium. "The task of hosting a Symposium would potentially strain the host committee tasked with handling the Symposium with less than 30 days notice."

"Many thanks to our AMSAT members who stepped forward to identify potential locations. Clearly, these volunteers have worked very hard to find an alternative site and would have done their best to host a Symposium. Unfortunately, time is working against us" notes Barry Baines, WD4ASW AMSAT's VP-Marketing & User Services.

The Board also wishes to thank Nick Pugh, K5QXJ for the extensive work that he has done to plan for the Lafayette Symposium and to his team for organizing what would have been an excellent Symposium in Louisiana.

The Board also noted that donations are needed to assist the relief efforts on the Gulf Coast. Given that this year's Symposium is cancelled, the Board hopes that individuals will decide to donate a portion of their funds to be used to cover their cost of attending the Symposium to an organization (such as American Red Cross) aiding the relief effort on the Gulf Coast.

AMSAT-NA Office Manager Martha Saragovitz will handle the process of providing refunds for registration fees already collected. Checks will be sent to those whose fees had previously been processed. In some cases, registrants had completed the registration process on the AMSAT web site by their credit cards. These charges will be destroyed. Checks covering registration that have been sent by mail and not processed will be returned to the sender.

Attendees holding reservations at the Holiday Inn should cancel their reservations prior to the scheduled arrival date in order to avoid first night room charges. The Holiday Inn in Lafayette has been experiencing telephone problems, so it may be best to contact the Holiday Inn Reservation Center (888-HOLIDAY) or use the Holiday Inn website:
http://www.holiday-inn.com
if the individual has their confirmation number for their reservation.

[ANS thanks Barry Baines, WD4ASW, and the AMSAT Board of Directors for the above information]

/EX

SB SAT @ AMSAT $ANS-254.02
AMSAT-NA Reschedules Key Meetings

AMSAT News Service Bulletin 254.02
From AMSAT HQ SILVER SPRING, MD.
September 11, 2005
To All RADIO AMATEURS
BID: $ANS-254.02

With the cancellation of the 2005 AMSAT Symposium in Lafayette, LA due to Hurricane Katrina, the AMSAT Board of Directors Meeting will now be held on Thursday and Friday, October 6 & 7 at the Wyndham Pittsburgh Airport Hotel.

Following the BOD Meeting which is expected to end by noon on Friday, the Eagle Team will have their meeting starting around 1400 on the 7th and conclude late Saturday. However, if discussions are continuing, provisions have been made to allow the Eagle Team to continue meeting on Sunday morning, October 9.

In addition, in order to comply with AMSAT Bylaws that require that an AMSAT Annual Meeting be held in October or November of each year, this meeting will take place on Friday evening as well, though the specific time has not yet been finalized. AMSAT is also investigating the feasibility of using various teleconference methods to allow AMSAT members to participate who are not on site.

With the exception of when the Board of Directors is in Executive Session, all three meetings are open to those who wish to attend. Information on the Wyndham Hotel where these meetings are taking place may be found at: http://www.wyndhampittsburghairport.com

The IARU meeting that was scheduled for Sunday morning, October 9 in Lafayette, LA has not been rescheduled.

[ANS thanks Barry Baines, WD4ASW, and the AMSAT Board of Directors for the above information]

/EX

SB SAT @ AMSAT $ANS-254.03
2006 AMSAT Symposium Plans Announced

AMSAT News Service Bulletin 254.03
From AMSAT HQ SILVER SPRING, MD.
September 11, 2005
To All RADIO AMATEURS
BID: $ANS-254.03

Recognizing that most of the 2005 Symposium attendees had already purchased non-refundable airline tickets to fly to Lafayette, Baton Rouge, or New Orleans, the Board also made a decision on the location for the 2006 AMSAT Symposium. 'Non-refundable' means the airline will not return the airfare to the individual due to cancellation but the value of the reservation may be applied to a future flight as long as cancellation occurs prior to the original flight. Other restrictions on making changes to non-refundable reservations may also apply. Some airlines have waived 'change fees' for altering a reservation associated with current reservations into New Orleans, Baton Rouge, and Lafayette.

The AMSAT Board of Directors voted September 6 nigh to accept an offer from Project OSCAR to host the 2006 Symposium in the San Francisco Bay area in the month of October. Emily Clarke, W0EEC will serve as host chairperson and will coordinate the Symposium.

"San Francisco is a great place to hold the Symposium," says Emily. "The roots of the Amateur Satellite Service can be found here as Project OSCAR began building the first amateur satellites in the Bay Area." Emily also notes the allure of the area for both 'geeks' and families alike. "We have everything from beaches to mountains, cities and wine country - so come to the Symposium and plan your vacation, too!"

In addition to the AMSAT Symposium, San Francisco is planned as a joint meeting with the ARISS International Delegates. "We're looking forward towards another successful joint meeting with AMSAT" says ARISS International Chairman and AMSAT VP-Human Space Flight Frank Bauer, KA3HDO.

Details about exact dates and hotel for the 2006 Symposium will be announced via ANS and posted on the AMSAT website later this month as they become available. Individuals holding airline reservations into Lafayette should hold off making changes until the dates and exact location of the 2006 Symposium are announced. In the meantime, AMSAT-NA looks forward towards an outstanding Symposium in October 2006 in the Bay Area.

[ANS thanks Barry Baines, WD4ASW, and the AMSAT Board of Directors for the above information]

/EX

SB SAT @ AMSAT $ANS-254.04
ESA Award for SSETI Express telemetry download competition

AMSAT News Service Bulletin 254.04
From AMSAT HQ SILVER SPRING, MD.
September 11, 2005
To All RADIO AMATEURS
BID: $ANS-254.04

The Education Department of ESA, the European Space Agency, is delighted to announce details of the award that will be offered to the amateur radio community in relation to the downloading of telemetry from their SSETI Express student built satellite. The

award will be given to the amateur who submits the largest number of valid telemetry and payload packets regardless of which band it is received on.

SSETI Express is scheduled for launch on September 27th from Plesetsk in northern Russia at approx 06:52 UTC. It will downlink telemetry and payload data in AX25 format at 9k6 on 437.250MHz and at 38k4 on 2401.835 MHz. It will later also be available for radio amateurs to use as a single channel FM transponder.

All radio amateurs around the world are encouraged to download the necessary software from the www.sseti.org/express website (this will be available starting approximately September 12) and to use the SERACC system to forward the telemetry and payload data to SSETI Express Mission Control. Submissions will be automatically recorded and the leaderboard will be shown on the website.

The winner will be offered the opportunity to visit the STEC06 Conference and Exhibition in Germany in Spring 2006. STEC, the Student Technology Education Conference, follows previous events in 2004 in Lausanne in Switzerland and in 2005 in Aalborg in Denmark.

The three day event is similar to the AMSAT-NA Symposium and the AMSAT-UK Colloquium but with more breakout technical sessions in addition to the Keynote Speeches. The meetings are always interesting and thought provoking and great enthusiasm and passion is shown by all the attendees. The post meeting attitude adjustment sessions have also proven to be exciting.

The winner will also be encouraged to present a paper on how he/she achieved their success - but this is not mandatory!

In addition to attending the STEC 06 Conference, the winner will be invited to visit ESA's Mission Operations Centre - ESOC - near Darmstadt in Germany where they will be given a private escorted tour of the facil-ities. ESOC currently controls the many exciting orbital and deep space ESA missions and will be responsible for the European Columbus module when it joins the International Space Station

For more information on the STEC events - check http://www.stec2005.space.aau.dk/ to see what this year's event included and for a few details of the ESOC facility, visit http://www.esa.int/SPECIALS/ESOC/

The winner will be the amateur at the top of the leaderboard at 00:00 on January 1, 2006. The prize will include economy class travel from your home location, accommodation and a "small" daily subsistence allowance.

AMSAT-UK wishes to congratulate and thank ESA for their generous prize, a first in the field, and is confident that it will add to the great enthusiasm for the SSETI Express project which already exists within the amateur radio community. It will be a great opportunity for us to demonstrate that the amateur radio groundstation "network" is a valuable

resource for satellite projects which are able include useful amateur payloads.

[ANS thanks Graham, G3VZV for the above information]

/EX

SB SAT @ AMSAT $ANS-254.05
SSETI Express Mission Pages Updated

AMSAT News Service Bulletin 254.05
From AMSAT HQ SILVER SPRING, MD.
September 11, 2005
To All RADIO AMATEURS
BID: $ANS-254.05

The SSETI Express Mission Pages at:
http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
has a short report with some photos of the work being done at the assembly facility at the Plesetsk Cosmodrome assembly facility.

Both the UHF and S band units have been tested and all appears ok so far.

Please continue to keep those fingers crossed for us

[ANS thanks Graham, G3VZV for the above information]

/EX

SB SAT @ AMSAT $ANS-254.06
ARISS Status for Week of September 5, 2005

AMSAT News Service Bulletin 254.06
From AMSAT HQ SILVER SPRING, MD.
September 11, 2005
To All RADIO AMATEURS
BID: $ANS-254.06

1. World Expo 2005 Contact Successful

The Japan Amateur Radio League (JARL) set up a radio station at the 2005 World Expo in Aichi, Japan. On Friday, September 2, twenty-one students, ranging in ages from 6 - 15, came from Aichi and the surrounding county to take part in this ARISS contact. John Phillips, KE5DRY, answered all twenty-one questions posed to him by the students, as approximately 150 people looked on. Eight newspapers and one television station provided media coverage of the event. Photos, video and audio of the contact may be found on the following website:
<http://jk1zrw.dyndns.org/expo2005.html.en>

2. Upcoming School Contacts

The Matthew J. Kuss Middle School in Fall River, Massachusetts, has been scheduled for a contact on Friday, September 16 at

1824 UTC. Kuss is a 2003 NASA Explorer School and has established its own radio club.

3. ARISS Videos Posted on AMSAT Website

ARISS participated in the Dayton Hamvention 2005 held over the May 20 - 22 weekend. ARISS Chairman Frank Bauer and ARISS Deputy Program Manager Mark Steiner attended, giving a presentation entitled, "Human Spaceflight Update: ARISS, the Moon and Mars," at the AMSAT Forum. Videos of the ARISS presentation and of the Hamvention activities are available on the AMSAT website.

AMSAT and ARISS members also participated in Space Day at the Udvar Hazy Center on May 5, 2005. A video clip which includes coverage of the exhibition booth and an interview with Frank Bauer is also available for viewing.

For all videos, see:
<http://www.amsat.org/amsat-new/information/videoNews.php>

4. Progress 19P to Include SuitSat and SSTV

The SuitSat hardware and the SSTV system will be launched on Progress 19P, which was scheduled to fly on September 8. The Russian EVA to deploy SuitSat is expected to take place in early December.

5. Cosmonaut Receives Birthday Wishes

Sergei Krikalev, U5MIR, made several general contacts during the last weekend of August. Stations from several countries spoke with the cosmonaut, wishing him a happy birthday. The contacts were made by operators in Kuwait, Malaysia, Columbia, Thailand, Argentina, U.S., Brazil, Australia, Puerto Rico, and Chile. Krikalev turned 47 on Saturday, August 27. To listen to a sample of the contacts, go to: <http://pd0rkc.mine.nu/>

6. Astronaut Training Status

Astronaut Sandy Magnus is preparing to take her amateur radio exam in the near future. Astronaut Nicole Stott is scheduled for a ham radio training session at JSC on Tuesday, September 6.

[ANS thanks Carol Jackson, KB3LKI for the above information.

/EX

SB SAT @ AMSAT $ANS-254.07
Heads Up - Alderney DXpedition May Include Satellite Activity

AMSAT News Service Bulletin 254.07
From AMSAT HQ SILVER SPRING, MD.
September 11, 2005
To All RADIO AMATEURS
BID: $ANS-254.07

The Alderney DX Team announced plans for a DXpedition to be on the air Wednesday, October 12 to Wednesday, October 19, 2005. This is a group of four amateur radio operators from around the U.K. who will be operational on all HF bands, 6 meters, VHF APRS, VHF/UHF SSB and hopefully, some satellite activity, from the Island of Alderney, the most northerly island of the Channel Islands group.

The first calls are planned to be made during the evening of October 12 most probably on 40 and 80 meters.

Additionally, Worked All Britain and Lighthouse activity may take place, depending on the availability of portable power supplies or a generator.

Further information available from: dave at g1ocn dot com

Skeds are welcomed and encouraged.

QSL route(s) are:

GU5XW via G5XW
GU1OCN via G5XW
MW0JZE via G5XW
MU3SDE via M3SDE

Further information available under individual call signs on QRZ.COM. A further updates will be sent prior to departure.

[ANS thanks the Alderney DX Team for the above information]

/EX

SB SAT @ AMSAT $ANS-254.08
Software Updates Available for Satellite Programs

AMSAT News Service Bulletin 254.08
From AMSAT HQ SILVER SPRING, MD.
September 11, 2005
To All RADIO AMATEURS
BID: $ANS-254.08

* Simon Brown, HB9DRV, announced FT-847 support has been added into the Ham Radio Deluxe software and is working well. Still to be added are further updates for proper same-band Doppler support. See: http://www.ham-radio.ch/forums/viewtopic.php?p=15785#15785

* Stefano Bravi, an SWL in Italy, announced a new version (1.2) of his PCSAT2 Telemetry Decoder program is available for download. See: http://fc.retecivica.milano.it/~stefano.bravi/pcsat2dec_12.zip

* Erich Eichmann DK1TB has released version 12.4 of the popular satellite tracking program SatPC32. The program has two significant new features. First is automatic internet download of Keplerian elements such as the amateur.txt file from celestrak.com. Second is an improved user interface for initial configuration of user location, radio and rotor interfaces, etc. The program may be downloaded from the author's

personal web site:
http://www.dk1tb.de/indexeng.htm

Click the "downloads" button on the left frame, then choose the appropriate "SatPC32 Demo" version (9.7 MB download). The demo version is fully functional except that the user must enter their lat/lon every time when launching the program. If you already have a SatPC32 registration code you may use that code to make the 12.4 version fully functional. If you have never purchased SatPC32 you may purchase a registration code from the AMSAT online store:
http://www.amsat-na.com/item.php?id=100020

DK1TB has generously donated SatPC32 to AMSAT-NA, AMSAT-UK, and AMSAT-DL. If you use SatPC32, please purchase a registration code from one of these groups. All of the purchase price will go to support amateur satellite programs.

[ANS thanks Simon, HB9DRV, Stefano, Wayne, W9AE, and Erich, DK1TB for the above information]

/EX

SB SAT @ AMSAT $ANS-254.09
AMSAT Awards

AMSAT News Service Bulletin 254.09
From AMSAT HQ SILVER SPRING, MD.
September 11, 2005
To All RADIO AMATEURS
BID: $ANS-254.09

Bruce Paige, KK5DO, AMSAT Director Contests and Awards, announces this week congratulations go out to John Sagi, N3YZ, for earning the Satellite Communicators Club Award and also a new member of AMSAT.

Reminder: There is still time to earn your AMSAT 51 on 51 Award which is good for contacts between January 1, 2005 and December 31, 2005.
To see all the awards visit http://www.amsat.org

[ANS thanks Bruce, KK5DO for the above information]

/EX

73,
This week's ANS Editor,
JoAnne Maenpaa, WB9JEJ
WB9JEJ at amsat dot org

374. Results of Discussion with Dick Norton

Newsgroup: rec.radio.amateur.space
Date: 2005-09-12 07:04:00 UTC
From: Rick <w7rtrick@firstinter.net>
Message-ID: <43252860.4060702@firstinter.net>
Source record: 1938

Carl,

I had a lengthy discussion with Dick Norton at the SW Div. convention this weekend. Seems he's a lot more saavy than I thought he was.

Well, you were right that there was a lot of back-room crap going on last week. Apparently, the Board took a vote (probably via telephone or e-mail) on whether or not to review your disqualification. According to Dick, there were only 4 votes supporting your request for a full Board review. Dick was one of them!! He told me that he told the Board that he could not see any upside at all to keeping you off the ballot; only downside. We discussed some of those things, and he pretty much agreed with my assessment that it would discourage future competition for office, discourage new blood, and perpetuate the image that the Board is a bunch of "good ol' boys" exclusive club that won't allow for any outsiders with dissenting opinions on much of anything. He also agreed that it sure looked like "paybacks" over the no-code issue. He also brought up the point that even given the Board members' worst case fears, that you would be a loud, divisive member of the Board, that you're only one vote, and could cause virtually no damage at all without support of other Board members. (He did not say he BELIEVED that the worst case would happen; only that it wouldn't cause any damage) Of course he mentioned that you would have to get elected first, in a three way race no less.

In summary, he was a progressive vote that was completely outvoted by a majority of Board members. As a result, I have a much better opinion of Dick now than when he was first elected. But now, you have a tough decision to make. Might I suggest the method of your LDS youth? (prayer)

Good luck with your decision.

Rick T.

375. Iridium...can you receive it ?

Newsgroup: rec.radio.amateur.space
Date: 2005-09-13 01:26:50 UTC
From: Bla <bla@geenmail.nl>
Message-ID: <b859f$43262ad2$3ec20f3b$27175@news.chello.nl>
Source record: 1939

Hi, i'd like to invite those interested in Iridium
to join our discussion-group where we currently
look at the possibilties of receiving and decoding
Iridium signals.

As you may have noticed the Iridium satphone system
has currently gained a lot of attention thanks to
it's use in Iraq and in the Katrina area.

Here's a few technical details:

Handset TX-power is an average 0,6 Watts
RX sensitivity is -118 dBM
Frequency-band 1616-1626,5 MHz (L-Band)
Duplex is Time Division Duplex TDD (RX/TX same freq)
Data-rate 2400 Bd (V42b compression)
Modulation is QPSK
Acess/Multiplex is TDMA/FDMA
Coverage: 100% Worldwide (sat in sight)
Calls currently barred to: N.Korea,N.SriLanka
Use forbidden in: Cuba,Iran,Libya,Sudan,Angola
Services: Voice,Data,Paging,Voice PTT,Group calls
Mobile < > Sat link=encryption NO (?)
Sat < > Groundstation link-encryption YES (?)
Sat < > Sat link-encryption: UNKNOWM (probably NO)
Standard end-to-end encryption: NO
Add-on encryption units available: YES

To take part in this discussion sign up at:

http://groups.yahoo.com/group/gsm-scanner

membership is free,the group is moderated.

this group is mainly talking about GSM and Cellphone
interception,encryption and security
but we will now extend our interests to satphones.

Greetings

contranl (moderator Yahoo group GSM-scanners)

376. WSR-254 AMSAT Weekly Satellite Report

Newsgroup: rec.radio.amateur.space
Date: 2005-09-13 12:44:38 UTC
From: JoAnne Maenpaa <wb9jej_no-spam@earthlink.net>
Message-ID: <WQzVe.11084$9i4.2096@newsread2.news.atl.earthlink.net>
Source record: 1940

```
This report is organized into 4 parts.
Part 1 - operational analog amateur satellites.
Part 2 - operational digital amateur satellites.
Part 3 - non - operational satellites
Part 4 - proposed satellites

SB SAT @ AMSAT <W8ISS $ANS-254.S1
WSR 254 Part 1 09/11/2005

AMSAT NEWS SERVICE BULLETIN 254.S1 FROM AMSAT HQ
SILVER SPRING, MD, SEPTEMBER 11, 2005
TO ALL RADIO AMATEURS
BID: $ANS-254.S1

VO-52 HAMSAT
Catalog Number: 28650
Launch Date: May 05,2005

Status: On orbit
Current Mode: U/V

Proposed frequencies:
-------------------
Indian transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacom : 145.940MHz continue carier signal

Dutch transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacon : 145.860MHz 12WPM with CW message
[07242005]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - ON
FM REPEATER - V/U

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
Analog voice uplink: 145.880 MHZ FM
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone
```

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

Current scheduled operating modes:

Due to the on going Huricane Katrina Relief Efforts in the Gulf Coast
States,
AO-51 will continue in the default mode V/U with 9k6 Digital, V/U, PBP BBS
mode. Updated information will be posted as soon as any changes are made.

[ANS-WSR thanks Bill, VE7WFG for the above information]
[09112005]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz (67.0 Hz PL tone) (See below for operating
procedures)
Downlink: 436.795 MHz

There have been unconfirmed reports on the amsat-bb remailer that SO-50 has
shifted downlink frequency as much as 5khz up. This both from Europe.

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The
order of operation is thus: (allow for Doppler as necessary)

1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm
the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT
the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window
will reset the 10 minute timer.
[09122004]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplink: 145.850 145.870 145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

John, N4QWL reports on July 16th, 2005:

Last evening I had a AOS to LOS qso with WI2W. FO-29 came up at 01:17z here in FM07 and I found WI2W and we chatted until 01:33z. The satellite was at 2 degrees elevation when I finally heard him start to crackle a bit. What a great QSO! To think that I watched this bird launch back in 1996 and it is still working so well is a real thrill. I believe I still have the video. I might just look for it and watch it again. Boy do I love this satellite stuff! Look for you all up there.

Please send the reception reports to lab2 'at' jarl.or.jp.
Please use the subject line: 'FO-29 reception report'.

Mineo, JE9PEL, has an FO-29 satellite telemetry analysis program that will automatically analyze all digital telemetry from the satellite (such as current, voltage and temperature). FO29CWTE is available at:
http://www.ne.jp/asahi/hamradio/je9pel/
[ANS-WSR wishes to thanks John, N4QWL for this week's report]
[07172005]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

The latest information on AO-27 from control operator Michael Wyrick, N3UC (former N4USI), can be found at:
http://www.ao27.org

An AO-27 question-and-answer page is available on the AMSAT-NA web site, with updates by Ray, W2RS. The URL is:
http://www.amsat.org/amsat/intro/ao27faq.html

[ANS-WSR thanks John, K6YK, for this week's AO-27 report]
[08292004]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Semi-operational in sunlight.
Return to active status: June 21,2002

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B

Downlink: 29.400 to 29.500 MHz CW/USB Mode A
145.975 to 145.925 MHz CW/USB Mode B
Beacon: 29.502 MHz, 145.972 MHz, 435.1 MHz, 2304.1 MHz

Emily, W0EEC has created a website to allow the users of AO-7 to record
contacts, observations and use of the satellite more effectively at:
http://www.emilyshouse.com/experthams/ao7/main.php
This includes the ability to log contacts.

Tim, K3TZ has written a program to decode AO-07 telemetry.
The program can be downloaded at:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

For more AO-7 info:
http://www.amsat.org/amsat/sats/n7hpr/ao7.html
[11142004]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: U/V CROSS-BAND REPEATER
Digipeater: Inactive

The current Expedition 11 crew is:
Commander Sergei Krikalev
Flight Engineer John Phillips

Worldwide packet uplink: 145.990 MHz FM
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM
Doppler Shift is 10 KHz

Russian callsigns: RS0ISS, RZ3DZR
USA callsign: NA1SS
Packet station mailbox callsign: RS0ISS-11
Packet station keyboard callsign: RS0ISS-3
Digipeater callsign: ARISS

This off the ARISS webpage:
http://www.rac.ca/ariss/oindex.htm#New%20ARISS%20Operations :
The ARISS program is pleased to announce that the amateur radio equipment
aboard the International Space Station is now operating in cross-band repeat
mode. We realize that many of you will miss the packet-operating mode. How-
ever, cross-band repeat allows further experimentation of the ISS amateur
radio system

The downlink for this operating mode remains the same, so listen for the station on 145.80 MHz. The new uplink frequency is 437.80 MHz. All frequencies
are subject to Doppler shifting. For further information on working satellites
and adjusting for Doppler shift, please review Emily Clark's (W0EEC) excellent
presentation on AMSAT's website:
http://www.amsat.org/amsat-new/information/faqs/Intro_sats.pdf

The ISS daily crew schedule can be found at:
http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is NOT
translated from Russian and posted.

More information is available at:
http://www.rac.ca/ariss
http://spaceflight.nasa.gov/station/reference/radio/
http://www.marexmg.org/fileshtml/unprotopage.html
http://www.issfanclub.com
http://oscar.dcarr.org/
[07242005]
NNNN
/EX

SB SAT @ AMSAT <W8ISS $ANS-254.S2
WSR 254 Part 2 09/11/2005

AMSAT NEWS SERVICE BULLETIN 254.S2 FROM AMSAT HQ
SILVER SPRING, MD, SEPTEMBER 11, 2005
TO ALL RADIO AMATEURS
BID: $ANS-254.S2

PCSAT2 ?0-??
Catalog Number:
Launch Date: August 1, 2005

Status: Operational

PCSAT2 was installed on the exterior of the International Space Station and was activated on August 3, 2005.

PCSAT2 CAPABILITIES: PCSAT2 is attached to the ISS and so its operations must be in cooperation with the ARISS communications suite to minimize any mutual interference and to coordinate activities. Here are the capabilities of the PCSAT2 and ARISS payloads:

PCSAT SYSTEM A:

435.275 PCSAT2 DOWNLINK 1200 baud packet with uplink on 145.825
435.275 PCSAT2 DOWNLINK Occasional user PSK-31 continuous downlink
145.825 PCSAT2 DOWNLINK 1200 baud packet
PCSAT SYSTEM B:

437.975 PCSAT2 DOWNLINK periodic Solar Cell data and PCSAT2 telemetry at
9600 baud
437.975 PCSAT2 DOWNLINK TNC-B command downlink at 1200 baud
437.975 PCSAT2 DOWNLINK User Voice Repeater with VHF uplink
437.975 PCSAT2 DOWNLINK Packet digipeater with VHF uplink

It looks like PCSAT2 can best contribute at this time by operating in
PSK-31 mode for the near future. This is a very exciting new transponder
mode which solves the congestion problem on FM repeaters by letting
multiple stations all communicate at the same time.

PSK-31 users are welcome to try out the new PCSAT2 PSK-31 transponder
on ISS with an uplink on 29.402 ± 1 KHz and downlink on 435.275 ±
Doppler using FM.

The FM downlink lets everyone operate full duplex and everyone to see
the same view of the passband as everyone else. THus you can see exactly
what your signal looks like to everyone else.

Help Wanted:

Here is your chance to become a viable part of the Amateur
Satellite Community.

We are looking for a volunteer satellite packet
station in Hawaii that is interested in helping with
telemetry and sat-gating of PCSAT2 and
ARISS packets. Requirements are:

1) General familiarity with packet
2) TNC connected to a cross band radio that
can RX on UHF and TX on VHF.
3) modest UHF beam and rotator system.

Contact WB4APR for more information.

Packets seen from PCSAT2 can be reviewed at:
http://www.findu.com/cgi-bin/pcsat2.cgi

A screen shot of both the 9600 bps and 1200 bps decoded data
as seen by Simon, 9W2QC, can be seen at:
http://www.9w2qc.net/pcsat2/

More information on PCSAT2 can be found at:
http://web.usna.navy.mil/~bruninga/pcsat2.html

[ANS-WSR thanks Bob, WB4APR and the U.S. Naval Academy Satellite Lab for
the aboveinformation.]

[08282005}
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - ON
FM REPEATER - V/U HIGH POWER

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
Analog voice uplink: 145.880 MHz FM
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

Current scheduled operating modes:

Due to the on going Huricane Katrina Relief Efforts in the Gulf Coast
States,
AO-51 will continue in the default mode V/U with 9k6 Digital, V/U, PBP BBS
mode. Updated information will be posted as soon as any changes are made.

[ANS-WSR thanks Bill, VE7WFG for the above information]
[09112005]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Non-Operational?????

Uplink/downlink: 145.827 MHz 1200 baud AX.25 AFSK via W3ADO-1
Aux/Uplink: 435.250 MHz 9600 baud via PCSAT-2 (off)
APRS Downlink: 144.390 MHz (Region 2)

PCSat is a 1200-baud APRS digipeater designed for use by stations using
hand-held or mobile transceivers. Downlinks feed a central web site at:
http://pcsat.aprs.org

The APRS-equipped PCSat was built by midshipmen from the U.S. Naval Academy
under the guidance of Bob Bruninga, WB4APR.
[07242005]
=====
CUTE-1
Catalog number: 27844
Launched: June 30,2003

Status: Operational

Uplink: ?
Downlink: 436.8375 CW
437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)

Cliff, K7RR reports:
In the latest Weekly Satellite Report, CUTE 1, #27844 is listed as
OPERATIONAL?
Indeed it is very operational as a CUBESAT sending CW telemetry on
436.8345 MHz. At the July 7 2005, 23:45:20 pass over the Western USA:
CUTE 1 6B A4 xx 7F D7 66A8 4702 FF FF7C 65
CUTE 1 6C A6 59 80 D9 66A8 4702 FF FE7C B6

The June 30th KEPS were within ten seconds of AOS and LOS. It is an very
good object to practice tracking as the orbit and transmitter power are
similar to proposed CUBESATS awaiting launch this December. As a check for
Doppler correction, the lack of change in tone is an excellent indicator.

CUTE 1 is a Japanese (Tokyo Institute of Technology) one kilogram
nanosatellite that was launched by a Rokot rocket from Plesetsk at
14:15 UT on 30 June 2003. It carries a 100 mW beacon at 436.8375 MHz.
Initial orbital parameters were period 101.4 min, apogee 831 km, perigee
819 km, and inclination 98.7?.

For further info about CUTE-1 goto:
http://lss.mes.titech.ac.jp/ssp/cubesat/operation/Schedule_e.html

[ANS WSR wishes to thank Cliff, K7RR, for this week's information]
[07242005]
=====
GO-32 TECHSAT-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
(435.325 n/a - temperature problems)
Uplinks: 145.850, 145.890, 145.930 FM
1269.700, 1269.800, 1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[03132005]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink: 145.850 or 145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz
Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[05152005]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for
APRS users.

Uplink: 145.90 145.92 145.94 145.96 MHz FM
(using 1200-baud Manchester FSK)
Downlink: 437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon: 2401.1428 MHz
Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

A WOD collection of current graphics along with general information
and telemetry samples can be found at:
http://www.telecable.es/personales/ea1bcu
[05092004]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational?

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK).
approx. 10 days ON, 10 days OFF
Mode-S Beacon: 2401.500 MHz. ... OFF
UHFBeacon: 435.025 MHz. ... OFF

OSCAR-11 is back! I received the good news, on Saturday morning, while
at the AMSAT-UK Colloquium. This was entirely unexpected! On Sunday
morning Bob G4VRC played me a recording of an early morning pass
received that day.

During the period 21 July to 14 August 2005 consistent signals have been
heard from 30 July to 08 August. Signals seem to be weaker than usual,
confirmed by the many reports received. However,since I last heard the
satellite on 30 April, I've reinstalled my antennas , which makes
comparisons difficult.

Many thanks for all the recent reports of OSCAR-11 including those from
KU7Z (who heard it first), KB2M, VK6XH, HK7MKE, KA2UPW, JE9PEL, G1OCN,
HB9SKA and G8OQW.

All the analogue telemetry channels, 0 to 59 are zero, ie they have failed. The status channels 60 to 67 are still working. One bit in channel 62, DSR mode, has changed from WRITE to READ. DSR is the Digital Store & Readout experiment. This could be significant if the experiment is still drawing current, but the other status bit indicates that it is switched OFF.

The on-board clock is now showing a very large error. It has lost approximately 19 days since 30 April. During the recent data collection period, the clock error has been changing at a decreasing rate. The size of the clock error and the rate at which it is changing is similar to the duration of the solar eclipse periods. This suggests that the clock might have been switching OFF during eclipses.

The eclipses have now ended, and the satellite should be in continuous sunlight for the remainder of this year, and well into next year. This should help the satellite to continue transmitting, although continuous sunlight can cause problems due to excessive temperatures.

If the watchdog timer is still operating on a 20 day cycle, ie. approximately ten days ON followed by 10 days OFF, then the VHF beacon should resume transmissions around 18 August.

The Beacon frequencies are -

VHF 145.826 MHz. AFSK FM ASCII Telemetry

UHF 435.025 MHz. OFF

S-band 2401.5 MHz. OFF

Listeners to OSCAR-11 may be interested in visiting my website which contains an archive of news & telemetry data. It also contains details about using a soundcard or hardware demodulators for data capture. There is software for capturing data, and decoding ASCII telemetry. The URL is www.users.zetnet.co.uk/clivew/

If you place this bulletin on a terrestrial packet network, please use the bulletin identifier $BID:U2RPT112.CWV, to prevent duplication.

[ANS-WSR thanks Clive, G3CWV, for the above information]

More information on UO-11 OSCAR-11 can be found at:
http://www.users.zetnet.co.uk/clivew/

MPEG3 files can be found here at Mineo, JE9PEL website:
http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm

[08212005]
NNNN
/EX

SB SAT @ AMSAT <W8ISS $ANS-254.S3
WSR 254 Part 3 09/11/2005

AMSAT NEWS SERVICE BULLETIN 254.S3 FROM AMSAT HQ
SILVER SPRING, MD, SEPTEMBER 11, 2005
TO ALL RADIO AMATEURS
BID: $ANS-254.S3

THE FOLLOWING ARE IN ORBIT BUT ARE
NON-OPERATIONAL AT THIS TIME:

POSAT-1 PO-28
Catalog Number: 22829
Launched : September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 435.250 MHz
435.275 MHz

Uplink: 145.925 MHz
145.975 MHz

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

PO-28 (POSAT-1), Portugal's first satellite, launched 12 years ago, will be turned over to Amateur Radio use in the very near future. That was the word July 30 from AMSAT-UK Secretary Jim Heck, G3WGM, during the AMSAT-UK International Space Colloquium in Guildford, England.

Launched September 25, 1993, the satellite operated as a packet store-and-forward BBS (9600 baud FM FSK) on Amateur Radio frequencies for several weeks in early 1994. Over the years, PO-28's primary usage has been commercial, although plans have called for eventually shifting its operation to ham radio use. G3WGM reports that following lengthy negotiations it has been agreed that the satellite can be switched permanently to amateur frequencies. The changeover is expected to take a couple of weeks.

The Portuguese satellite was built at the University of Surrey as part of a collaborative satellite technology program that involved industry and academe. Uplink frequencies will be 145.925 and 145.975 MHz. Downlink frequencies will be 435.250 and 435.275 MHz. More information on PO-28 is on the AMSAT Web site http://www.amsat.org/amsat/sats/n7hpr/po28.html.

Uplink Frequencies: 145.925 and 145.975 MHz
Downlink Frequencies: 435.250 and 435.275 MHz

Orbit: 822 x 800 km, 98.6 deg inclined, sun-synchronous.

Transponder capabilities include FM repeater and 38k4 data. If you want to hear how loud this satellite is, listen on 429.950 until the change back to amateur radio service.

Keplerian elements for PO-28 are not currently contained in the AMSAT keps bulletins, but can be found at Celestrak in amateur.txt using the name "POSAT". Users of Space Track should query the NORAD Satellite ID number 22829. The name listed by Space Track is "EYESAT A".

More information of POSAT-1 can be found at:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
http://www.amsat.org/amsat/sats/n7hpr/po28.html
[ANS-WSR wishes to thanks Trevor, M5AKA and Jim, G3WGM, for this week's information.]
[08072005]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon: 145.810 MHz (unmodulated carrier)

AO-10 has been locked into a Mode-B, 70-cm uplink and
2-meter downlink for several years.

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Non-operational

Uplink: 145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink: 435.812 MHz SSB
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Alberto E. Zagni - I2KBD reports on 02/13/05
The spacecraft is in MBL (safe mode) and is trasmitting just 6 channels of telemetry. Temperatures and voltage are nominal, but there seems to be a problem with the onboard receiver, refusing to accept commands. The spacecraft was launched in 1993, thus nearing 12 years in orbit...

Best regards
Alberto E. Zagni - I2KBD
ITAMSAT Mission Director

More information of IO-26 can be found at:

http://joshua.micronet.it/english/itamsat/itamsathome.html
http://www.amsat.org/amsat/sats/n7hpr/io26.html
www.itamsat.org

[02132005]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089

Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon: 29.408 MHz
Robot: 29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB
Beacon: 145.860 MHz
Robot: 145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB
Beacon: 29.352 MHz (intermittent)

SSB meeting frequency: 29.380 MHz (unofficial)

John, KD6PAG reports on June 16, 2004 to ANS:
RS-15 beacon seemed to be back in the mode where it's a tone about 5 seconds
off and then 5 seconds on this morning.

ANS is looking for more confirmations of RS-15 coming back.

[ANS thanks John, KD6PAG for RS-15 information]
[06202004]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplink: 145.84 145.86 145.88 145.90 MHz FM
(using 1200-baud Manchester FSK)
CW downlink: 437.125 MHz
Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)
Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM
Broadcast Callsign: HLO1-11
BBS: HLO1-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a
non-operational status.
[05092004]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM (9600-baud FSK)
Downlink: 436.500 MHz FM
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink frequency (listed on the PanSat web site) 436.500 MHz

The satellite is not available for general uplink transmissions.

The Naval Postgraduate School developed PanSat. At the time of
launch, PanSat spread-spectrum digital transponders were to
be available to Amateur Radio operators along with software to utilize
this technology.

The satellite is still operating, however, the spread spectrum packet
radio portion never took place. The spacecraft is now beyond it's
initial 2-year mission life, but telemetry records are still being
downloaded.

For more information, visit the official PanSat web site at:
http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS has no further information]
[05232004]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlink: 437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA
web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplink V-band 145.840 - 145.990 MHz CW/LSB
U-band 435.550 - 435.800 MHz CW/LSB
L1-band 1269.250 - 1269.500 MHz CW/LSB
L2-band 1268.325 - 1268.575 MHz CW/LSB
S1-band 2400.350 - 2400.600 MHz CW/LSB
Downlink: S2-band 2401.225 - 2401.475 MHz CW/USB
K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon: 2401.323, 24,048.035
[05232004]

SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational
Downlink: 437.075 MHz
Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz
Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
callsign KE6QMD, as per the user service agreement located at the following
URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Semi-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

AO-49 (SAFIR-M) is a German amateur radio payload onboard the small German
scientific satellite "RUBIN-2".

AO-49 was built by the German amateur radio association "AATiS
e.V." (German
acronym for "Arbeitskreis Amateurfunk und Telekommunikation in der Schule",
which means: 'working group for amateur radio anand telecommunications in
schools'). AO-49 is designed as a "store and broadcast" system for APRS
based messages, dedicated for the use of schools in combination with the
existing WX-Net and planned buoy experiments in Germany.

No transmissions detected since the 1st of February 2003! It appears
AO-49 is not properly aligned to illuminate the solar panels. This
should end soon. Due to its orbit, AO-49 will be in a phase without
eclipses until 13Feb03.

Martin DG8UAU has written a small software program "SAFIR-M Decoder" to
allow decoding of the received DATA0 frames. It is available at:
http://amend.gmxhome.de in the section Aktuelles.

Details on AO-49 (SAFIR-M) can be found at:
http://amend.gmxhome.de

Information about AATiS e.V. is available at:
http://www.aatis.de
[05092004]
NNNN
/EX

SB SAT @ AMSAT <W8ISS $ANS-254.S4
WSR 254 Part 4 09/11/2005

AMSAT NEWS SERVICE BULLETIN 254.S4 FROM AMSAT HQ
SILVER SPRING, MD, SEPTEMBER 11,2005
TO ALL RADIO AMATEURS
BID: $ANS-254.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE
PROPOSED FOR LAUNCH AT THIS TIME:

UCISAT ?O-??
Catalog number:
Proposed Launch Date: October 31, 2005

Status: Under Construction

Downlink: Submission in Progress
Uplink: Submission in Progress
Callsign: Submission in Progress

This from Matt Bennett, KF6RTB, UCISAT Communications Team Member:

Our website is www.ucisat.net .This is a new website, however, and doesn't
have the "Status" section active yet. Because of the growing interest in our
project, I'll push our webmaster to create updates (hopefully) on a week-to-
week basis. For now, the current status of the mission is as follows:

-Expected Launch Date: October 31st, 2005
-Frequency Allocation: Submission in Progress
-Construction Status: Sub-Assembly
[WSR to thank Matt Bennett, KF6RTB, for this week's report.]
[01302005]
=====
SSETI ?O-??
Catalog Number:
Proposed Launch Date: LATE 2005

Status: AWAITING LAUNCH

Graham, G3VZV reports:
We have now been advised that the revised launch date for SSETI Express and the other satellites on the DMC3 COSMOS launch has been confirmed as September 27th - so please keep those fingers crossed!

SpaceDaily has a report about SSETI at:
http://www.spacedaily.com/news/internet-04zzzu.html

You can find more info about SSETI at:
http://sseti.gte.tuwien.ac.at/WSW4/

Latest news about SSETI can be found at:
http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php

Look at the website for the SSETI Express webcam
http://sseti.gte.tuwien.ac.at/WSW4/webcam.htm

[ANS thanks Graham, G3VZV for the above information]
[09112005]
=====
PHASE 3E ?O-??
Catalog Number:
Proposed Launch Date: Early 2006

Status: Under Construction

William Leijenaar, PE1RAH reports on July 16th, 2005:

Hi AMSATs,

I always like to inform the AMSATs public about my P3e work, but unfortunatly due to
some reasons there was not much time and nothing much to say...

However, now I am happy to announce that the my MODE-UV transponder design for P3e is ready at the P3e integration place in Marburg (Germany). About 4 weeks ago I was in Marburg before, where the transponder has been checked. Unfortunatly some unsure things were found in the design. The unsure things were about long term stability after many years in space.

At home in The Netherlands, I changed the design with some minor changes to have a secure long term stability. Finally I tested the transponder again and it performed well within the specifications. Again something learned for

future transponder designs :o)

Last Wednesday I drove to AMSAT-DL P3e integrations place in Marburg again, and have my transponder again checked. In the beginning it seemed that the 70cm receiver lost 10dB in sensetivity. After some more measurements we find out that it was due to a bad attenuator we used for protection at the input.

Together with Karl Meinzer we looked for any problems, but so far we could see (without HELAPS) all was okay. In the afternoon I went back home again, this time without the MODE-UV.

Now the MODE-UV will get a new home, the home of P3e... :o)
I hope the transponder will work like its elder sister in AO-10, and you all will enjoy it for many years...

It was lots of work to get it this far, but I know it is for a good purpose...

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/

[ANS-WSR wishes to thank William Leijenaar, PE1RAH for this week's report]
[07172005]
=====
CP1 ?o-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N6CP
Proposed Transmit Frequency: 436.845
[03272005]
=====
CP2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.325
[03272005]
=====
HAUSAT1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: D90HP
Proposed Transmit Frequency: 437.465
[03272005]
=====
ICE Cube 1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: W2CXM
Proposed Transmit Frequency: 437.305
[03272005]
=====
ICE Cube 2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N2VR
Proposed Transmit Frequency: 437.425
[03272005]
=====
ION ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.505
[03272005]
=====
KUTEsat ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: KC0RMW
Proposed Transmit Frequency: 437.385
[03272005]
=====
MEROPE ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: K7MSU-1
Proposed Transmit Frequency: 145.980
[03272005]
=====
nCUBE1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
2407.25
[03272005]
=====
RINCON ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
437.345
[03272005]

=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SEEDS ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: JQ1YGU
Proposed Transmit Frequency: 437.485
[03272005]
=====
Mea Huaka ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.405
[03272005]
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/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satelite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

377. Antennas for AO-51?

Newsgroup: rec.radio.amateur.space
Date: 2005-09-16 10:55:38 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <xaSdnTooYqMHObfeRVn-uQ@bright.net>
Source record: 1941

What polarization is used on AO-51? I'm using my 2M vertical whip for transmit and that seems to work OK to get into the satellite (I assume it's working OK as others are hearing me and calling back). I have a horizontal loop on the 435 receive side. Even on high elevation passes, it only gives S1 or S2 signals and lots of breaks in the audio. Should I also run a vertical antenna on 435? This setup is in the mobile, so I am unable to use any sort of steerable antenna. Ideas kindly welcomed!

Scott
N0EDV

378. Re: Antennas for AO-51?

Newsgroup: rec.radio.amateur.space
Date: 2005-09-16 19:53:32 UTC
From: Roger Conroy <rogerconroy@nospam.hotmail.com>
Message-ID: <dgf7qp$556$1@ctb-nnrp2.saix.net>
Source record: 1942

"Scott" <acepilot@bloomer.net> wrote in message
news:xaSdnTooYqMHObfeRVn-uQ@bright.net...
> What polarization is used on AO-51? I'm using my 2M vertical whip for
> transmit and that seems to work OK to get into the satellite (I assume
> it's working OK as others are hearing me and calling back). I have a
> horizontal loop on the 435 receive side. Even on high elevation passes,
> it only gives S1 or S2 signals and lots of breaks in the audio. Should I
> also run a vertical antenna on 435? This setup is in the mobile, so I am
> unable to use any sort of steerable antenna. Ideas kindly welcomed!
>
> Scott
> N0EDV

Try the simplest of them all - a 1/4 wave groundplane.

73
Roger ZR3RC

379. ANS-261 AMSAT Weekly News Service Bulletin

Newsgroup: rec.radio.amateur.space
Date: 2005-09-19 15:28:33 UTC
From: JoAnne Maenpaa <wb9jej_no-spam@earthlink.net>
Message-ID: <BOAXe.477$QE1.76@newsread2.news.atl.earthlink.net>
Source record: 1943

AMSAT NEWS SERVICE
ANS-261

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* AMSAT BoD, Annual Meeting, and Eagle Satellite Team Meeting
* 2005 AMSAT Board of Directors Election Results
* Hotel Survey for 2006 AMSAT Symposium
* SuitSat Hardware On-Orbit/SSTV Equipment Aboard ISS
* PCSAT2 Enabled for 1200 and 9600 Baud Digipeating Operation
* IGATE Manual Available On-line
* ARISS Status for the week of September 12, 2005
* SSETI Launch Information Sheet Released
* SatPC32 V12.4 Tracking Program DDESat32 Download Available
* AMSAT Awards This Week
* New Release of InstantTune Version 1.50

SB SAT @ AMSAT $ANS-261.01
AMSAT BoD, Annual Meeting, and Eagle Satellite Team Meeting

AMSAT News Service Bulletin 261.01
From AMSAT HQ SILVER SPRING, MD.
September 18, 2005
To All RADIO AMATEURS
BID: $ANS-261.01

Rick Hambly, W2GPS, AMSAT-NA President, reminds all members that the 2005 AMSAT Board of Directors Meeting will be held on Thursday, October 6th and ending at noon on Friday, October 7th. The AMSAT Annual Meeting will follow later on Friday. An Eagle satellite design team meeting will follow on Friday afternoon through Sunday morning, October 7th through the 9th. These are open meetings and all AMSAT members and guests are invited to attend. We are staying at the Wyndham Pittsburgh Airport Hotel located near the Pittsburgh International Airport. The phone number of the hotel is 412-788-8800.

[ANS thanks Rick, W2GPS for the above information]

/EX

SB SAT @ AMSAT $ANS-261.02
2005 AMSAT Board of Directors Election Results

AMSAT News Service Bulletin 261.02
From AMSAT HQ SILVER SPRING, MD.
September 18, 2005
To All RADIO AMATEURS
BID: $ANS-261.02

As a result of the 2005 AMSAT Board of Directors elections, Rick W2GPS, Emily W0EEC, Gunther W8GSM, and Barry WD4ASW will serve on the Board for two years. The first alternate is Bob N4HY and the second alternate is Lee KU4OS. The results of the voting are (829 votes were cast):

Richard M Hambly, W2GPS - 575
Emily Clarke, W0EEC - 483
Gunther Meisse, W8GSM - 466
Barry Baines, WD4ASW - 458
Bob McGwier, N4HY - 399
Lee McLamb, KU4OS - 380
Bruce Paige, KK5DO - 302
Greg Wycoff, N0ZHE - 131

Submitted by Martha Saragovitz
AMSAT Manager

[ANS thanks Martha for the above information]

/EX

SB SAT @ AMSAT $ANS-261.03
Hotel Survey for 2006 AMSAT Symposium

AMSAT News Service Bulletin 261.03
From AMSAT HQ SILVER SPRING, MD.
September 18, 2005
To All RADIO AMATEURS
BID: $ANS-261.03

The 2006 Symposium planning committee would like to welcome AMSAT and ARISS to San Francisco. We invite everyone to participate in a survey about hotels and hotel services. The Bay Area has so much to offer we will be faced with a number of decisions between hotels, and what better way to make a decision than to give added weight to the preferences of the attendees.

The survey is located at:
http://www.amsat.org/amsat-new/symposium/survey.php

We want to lock in hotel rates early to get the best rates and we also want to give adequate time for people who have to cash in tickets they booked for Lafayette. So the survey will end on October 1. We hope to announce the hotel a few weeks later. So please

express your opinions early before the survey ends.

In the future we will also have surveys about events, tours, spouse tours and things for kids, so please visit the Symposium part of the AMSAT website often.

Your opinions matter, and more importantly we want to make you welcome here in the bay area.

[ANS thanks Emily, W0EEC, and Project OSCAR, hosts of the 2006 AMSAT Symposium in the San Francisco Bay area for the above information]

/EX

SB SAT @ AMSAT $ANS-261.04
SuitSat Hardware On-Orbit/SSTV Equipment Aboard ISS

AMSAT News Service Bulletin 261.04
From AMSAT HQ SILVER SPRING, MD.
September 18, 2005
To All RADIO AMATEURS
BID: $ANS-261.04

Frank H. Bauer, KA3HDO, who is the ARISS International Chairman, AMSAT V.P. for Human Spaceflight Programs, and NASA ARISS Program Manager, provided an update on the status of the SuitSat and the SSTV gear for the ISS this week.

On Thursday September 8 at 13:08 UTC, Progress 19P lifted off from the Baikonur Cosmodrome in Kazakhstan. Included in the 2.5 tons of fuel, food and supplies are two Amateur Radio on the International Space Station (ARISS) systems---the Suitsat amateur radio hardware and the Slow Scan Television (SSTV) hardware and software. The successful docking of Progress to ISS on September 10 culminates the successful design, development, certification and delivery of these two ARISS Projects. The ISS Expedition 11 crew will unpack this equipment, making it available for installation, use and deployment by the Expedition 12 crew.

The Suitsat amateur radio system, coupled with a school artwork project, is planned to be installed in an outdated Russian Orlon spacesuit. It will then be deployed from the ISS during an Extra Vehicular Activity (EVA, or spacewalk). This is expected to occur in the December timeframe by the Expedition 12 crew. The Suitsat amateur radio system will beam down special messages and an SSTV image from within the Orlon space suit as it floats in space. Suitsat radio system will allow hams and students to track the suit and decode special international messages, space suit telemetry, and a pre-programmed Slow Scan TV image through its specially built digital voice messaging system and amateur radio transmitter. As built, Suitsat will be a transmit-only capability that will run on the space suit's battery power.

As part of the Suitsat project, a CD with hundreds of school pictures, artwork, poems, and student signatures is included. Two identical CDs

were flown, one will go in the suit and the other will be for the crew to review. Using the crew CD, we hope to downlink these images using the SSTV system that will be located inside the Service Module once it is operational. There are approximately 300 items on the CD. These are from all over the world (Japan/Asia, Europe, Russia, Canada, US, South America and Africa). Several NASA Explorer Schools participated as well as numerous ESA and Russian Space Agency-sponsored schools.

The idea for Suitsat was first conceived by the ARISS-Russia team, led by Sergey Samburov, RV3DR, and was extensively discussed at the joint AMSAT Symposium/ARISS International Partner meeting in October 2004. The project, also called Radioskaf or Radio Sputnik in Russia, is being led by project manager A. P. Alexandrov and Deputy Project Manager A. Poleshuk from RSC Energia, located in Korolev (Moscow area) Russia. On the US side, the hardware project development was led by AMSAT member Lou McFadin, W5DID.

Since October 2004 the Suitsat design concept matured and evolved due to the challenging development time constraints. In a very short timeframe, the ARISS international team designed built and tested a simple, yet fully featured system that we hope will inspire hams and students around the world.

The SSTV system will be installed inside the Service module as an integral part of the ARISS ham radio system. It will transmit and receive (JPG) still images from the International Space Station in a format called Slow Scan TV (SSTV). When fully operational, the SSTV system is capable of sending up to 480 images per day from ISS. It will also be able to receive images from amateur radio stations on Earth. This system will utilize the already installed Kenwood D-700 radio and the ARISS antennas mounted on the Service Module. The SSTV equipment flown on Progress 19P includes the SpaceCam software, a radio/computer interface module, and data cables. The dedicated laptop for SSTV operations will be launched on a subsequent Progress vehicle.

Over the course of the past several months, the Suitsat and SSTV system passed the stringent NASA and Energia safety certification process and were deemed ready for flight--clearing the way for the incorporation into the Progress 19P vehicle. More information on SSTV and Suitsat will be provided as we get closer to installation and deployment .

On behalf of the ARISS International team, I want to congratulate the Suitsat hardware development team and the SSTV development team on a job well done. We look forward to future operation of these systems on ISS, inspiring the next generation of space explorers.

ARISS is an international educational outreach program partnering the ISS space agency partners--NASA, RSA, ESA, JAXA, and CSA, with volunteers from the AMSAT and IARU (International Amateur Radio Union) organizations from participating countries. ARISS offers an inspirational opportunity for students to experience the excitement of Amateur Radio by talking directly with crewmembers on-board the International Space Station. Teachers,

parents and communities see, first hand, how Amateur Radio and crewmembers on ISS can energize youngsters' interest in science, mathematics, technology, and learning. Further information on the ARISS program is available on the website http://www.rac.ca/ariss

[ANS thanks Frank, KA3HDO for the above information]

/EX

SB SAT @ AMSAT $ANS-261.05
PCSAT2 Enabled for 1200 and 9600 Baud Digipeating Operation

AMSAT News Service Bulletin 261.05
From AMSAT HQ SILVER SPRING, MD.
September 18, 2005
To All RADIO AMATEURS
BID: $ANS-261.05

The PCSAT2 packet system is enabled for both 1200 and 9600 baud digipeating, and it can also do cross-BAUD digipeating. That is 1200 up and 9600 down or 9600 up and 1200 down. We had no specific application in mind, but it is there for experimentation.

For 1200 or 9600 use the path VIA ARISS. For cross-BAUD operation use the path VIA XBAUD.

The easiest way to experiment is to use either the Kantronics KPC-9612+ TNC or the Kenwood D7 or D700 that can both easily switch between 1200 and 9600 baud.

Experiment with the shortest TXD delay you can get by with at 9600 baud. Typically for one-at-a-time packets like APRS, there is not much advantage for operating at 9600 baud, because the TXD delay is often as long or longer than the data, so the actual throughput advantage of 9600 is more like a factor of 2 than 8.

Perhaps the value of operating at 9600 baud would be in downloading Mail from the PCSAT2 PBBS. That is the only time when all the delays will be amortized and 9600 baud would give you a significant throughput advantage.

Users are welcome to use the PCSAT2 digipeater for experimentation.
Uplink is 145.825
Downlink 435.275 +/- 10 KHz Doppler
DIGIpeater call is ARISS for 1200 or 9600
DIGIpeater call is XBAUD for cross-baud
PBBS callsign is MAIL-1

The Kenwood D7 and D700 can do either 1200 or 9600 and on either band, but not both baud rates at the same time. The KPC-9612+ can transmit either 1200 or 9600, but because it is dual port, it can receive both at the same time.

[ANS thanks Bob, WB4APR, and the US Naval Academy Satellite Lab for the above information]

/EX

SB SAT @ AMSAT $ANS-261.06
IGATE Manual Available On-line

AMSAT News Service Bulletin 261.06
From AMSAT HQ SILVER SPRING, MD.
September 18, 2005
To All RADIO AMATEURS
BID: $ANS-261.06

Cor, PD0RKC, has created an easy manual to make your APRS station also function as an IGATE station. When APRS stations send their beacons on the air, including via ISS and PCSAT2, the IGATE station receives the beacons and fowards them to the internet.

APRS packets, containing position coordinates or messages, received via the ISS and forwarded via IGATE stations can be viewed at:
http://www.findu.com/cgi-bin/ariss/index.cgi

The easy IGATE manual for UIVIEW can be found on-line at:
http://pd0rkc.mine.nu (click on the ISS button).

In case you can not visit Cor's website you can send him an e-mail so he can send you his IGATE information via e-mail:
isszarya (at) hotmail.com

[ANS thanks Cor, PD0RKC for the above information]

/EX

SB SAT @ AMSAT $ANS-261.07
ARISS Status for the week of September 12, 2005

AMSAT News Service Bulletin 261.07
From AMSAT HQ SILVER SPRING, MD.
September 18, 2005
To All RADIO AMATEURS
BID: $ANS-261.07

1. Japan Red Cross Contact Successful

The Japan Red Cross Radio Volunteer Corps of Fukui-prefecture, Wakasa Branch, in Obama-City, Fukui-ken, Japan had a successful ARISS contact with the ISS. The Radio Corps provides training on how to communicate via amateur radio during an emergency, and the students are also involved with the Wakasa branch of the Young Astronauts Club-Japan (YAC-J), which is lead by Japanese astronaut Mamoru Mouri. On September 8, astronaut John Phillips, KE5DRY, answered 15 questions posed to him by the thirteen students. Approximately 110 people gathered to observe the contact, including four newspapers, and four television stations. The audio, video, photos, and three newspaper articles covering the event may be found on ARISS member, Satoshi Yasuda's website.
See: http://jk1zrw.dyndns.org/ -Select "Successful School in

Region 3", and then "The Japan Red Cross Corps" contact.

2. Upcoming School Contacts

Students from Sanderson High School in Sanderson, Texas will speak
to John Phillips on Thursday, September 22 at 16:08 UTC.

3. AMSAT and ARISS Joint Meetings, 2006

ARISS plans to hold its international face to face meeting immediately
following the 2006 AMSAT-NA Symposium which will be held in the San
Francisco Bay area. Details for the joint meetings will be announced
later this month.

4. PCSAT2 Mode Change

PCSAT2, which operated in PSK-31 mode for the last few weeks, has been
changed to UI/APRS Packet digipeater mode.
See: http://www.ew.usna.edu/~bruninga/pec/pc2ops.html

[ANS thanks Carol, KB3LKI for the above information]

/EX

SB SAT @ AMSAT $ANS-261.08
SSETI Launch Information Sheet Released

AMSAT News Service Bulletin 261.08
From AMSAT HQ SILVER SPRING, MD.
September 18, 2005
To All RADIO AMATEURS
BID: $ANS-261.08

The current status of the launch programme can be seen at
http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php

The latest version of the LEOPS information sheet is appended below.
Its primary audience is "non amateur" so please do not be upset by
some of the basic information and advice that it contains!

SSETI Express LEOPS (Launch & Early Operations) Info

These are the preliminary TLEs for SSETI Express based upon a launch at
06:52:26 UTC on September 27, 2005.

They will probably be updated just before launch and will certainly only
work for a couple of days after launch. By then we should have received
updates from NORAD and can then start to identify which orbit data refers
to which satellite.

For the first few orbits they will also be valid for the cubesats and all
the other payloads on the same launch. These are detailed below.

SSETI1
1 288XXU 0503XC 05270.28641000 -.00000001 00000-0 10000-4 0 12
2 288XX 98.1900 167.4100 0001920 0.0000 50.5000 14.60850000 00013

This data can be entered into any of the normal "tracking/prediction" programmes for display at launch events.

SSETI Express UHF transmitter will be activated approximately 100 minutes after launch. The details below give some information about what we expect to hear and when for Express and the cubesats.

To receive the UHF transmissions from Express and the cubesats there are two possibilities.

The simple possibility is a handheld receiver and simple hand held TV type yagi antenna which is pointed in the general expected direction. When Express is heard then this will only be obvious by a sudden burst of increased noise from the loudspeaker. - the 9k6 data sounds just like noise to the human ear! This will not be very impressive to invited guests but will make the Express teams themselves very happy. Remember to have three frequencies stored in the radio 437.260 MHz at AOS, 437.250 MHz for when the satellite is at its nearest point to you and 437.240 MHz as it moves away from you. This is Mr. Doppler at work.

The more complicated possibility is to use a "proper" receiving station with automatically steered circularly polarised antennas, a mast head preamp, Doppler adjusted UHF radio with a widened IF to pass the 9k6 data and a suitable TNC feeding a computer and display. With this set-up it should be possible to display the decoded telemetry from the satellite.

There is already a satellite in a very similar orbit using similar frequencies and modulation method to Express. This is called AO51 (Amsat Oscar 51) also known on some databases as Echo. It is strongly recommended that you use the signals from this satellite to test your receive system (simple or complicated options) so you have already had experience before the launch day and demonstration. AO51 has a variety of scheduled activity modes and frequencies and these can be checked here:
http://www.amsat.org/amsat-new/echo/ControlTeam.php
Most times it is radiating a voice signal and a 9k6 data signal simultaneously.

SSETI Express

Downlink: 437.250 MHz AX25 9k6 FSK
(also 2401.835 MHz 38k4 data and voice - but not for initial operations)

The first transmission will occur approximately 65 min after separation from the launch adaptor- approx 100 mins after launch - we now expect this now to occur around 08:32 UTC when Express is over northern Europe.

The type of the first transmissions will depend on the state of the battery.

In Nominal mode - a sub 1 second burst of AX25 telemetry every 18 seconds.

In Recovery or Safe mode - simple on/off telemetry comprising 16 x 100msec carrier pulses. This telemetry is repeated every 30 seconds in Safe Mode and every 2 mins when in Recovery Mode.

The satellite will transmit at a power of 3 watts.

The next time that Express can be heard over Europe will be the pass that starts in Aalborg at around 10:03 UTC. This pass gives good coverage of all of Europe and should also be audible from the launch site.

Reception reports will be welcome by email at operations@sseti.net or by placing them on the SSETI Newsgroup at slave.gte.tuwein.ac.at in the folder "sseti.express.report" where you will also be able to see reports from other locations around the world.

Full information on receiving SSETI Express signals, decoding the telemetry, submitting it to the project team and entering the competition will be posted at: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php.
This will have links to all the updated pages as they occur.

NCUBE2: a cubesat which will be released by Express

Downlink: 437.305 MHz
Bitrate: 9600b/s
Modulation technique: GMSK

The first transmission will occur 20 min after separation from Express - approx 120 mins after launch.

The message: "DE=LA1CUB=NCUBE2=FF=LA1CUB===" is morsed using a 2400Hz tone, 26 words per minute where FF is a hex number [00=3,0V - FF=4,5V]
If battery voltage is above 3,8V, every 2 minutes
If battery voltage is below 3,8, every 5 minutes

At the end of the message an unnumbered AX.25 packet is attached containing the string:

DE=LA1CUB=NCUBE2=NORWEGIAN CUBESAT - WWW.NCUBE.NO
In the header of the AX.25: Callsign: NCUBE Destination: EARTH
The satellite will transmit at a power of 1.5 W at full battery charge
Reception reports will be welcome email to ncube@rocketrange.no or by phone +47 76 14 44 00

UWE-1: a cubesat which will be released by Express

Downlink 437.505 MHz. 9k6 FSK AX25 packet
The first transmission will occur 6 min after separation from Express approximately 106 minutes after launch.
The satellite will transmit for about 1 sec every 1 minute. The output power of the transceiver is approximately 1 watt.
Further details will be made available later.

Reception reports will be very welcome at cubesat@informatik.uni-wuerzburg.de.

CUBESAT Xi-V: a cubesat which will be released by Express

CW signal on 437.465 MHz
FM packet of AFSK AX.25 on 437.345 MHz
The first CW transmission will occur 30 minutes after separation from Express approximately 130 minutes after launch.

FM packet will not be transmitted unless commanded by the ground station.
The interval of the CW signal is about 30 seconds.
The output of CW signal is 80 mW, and that of FM packet is 800 mW.
Both signals share one dipole antenna, so the satellite cannot transmit
both signals at the same time.
The email address to receive reports will be announced at the ground
station web page http://gs.space.t.u-tokyo.ac.jp/ before launch.

SAFIR-S

A module integrated within the RUBIN experimental payload which will stay
attached to the launch adaptor.
A frequency of 2401.900 MHz is used. Callsign DP1AIS
One transmission cycle consists of 15 sec. FM-voice beacon transmission and
short 9k6 G3RUH data packets every 15 seconds. Total duration of the above
described transmission cycle is about 2-3 minutes.
Reports can be sent to DG6BCE@aatis.de

MOZHAETS

There is also a satellite in the Mozhaets series included in this launch but
no details of its transmissions are known.

LAUNCH DAY BROADCASTS

SATELLITE

The launch will be broadcast via ESA Television on Astra 1 G at 19.2 degrees
east:

Transponder: 1.108
Reception frequency: 12551.50 MHz
Polarization: Vertical
Symbolrate: 22Msymb/s
FEC: 5/6
TS_ID: 1108
ON_ID: 1
Service Name: ESA
Service provider: ASTRA
Service_ID: 12140
TXT: none

This is always on and will transmit an ESA logo starting three days
before the launch. The programme is expected to run for approximately
30 minutes and will include the launch sequence live from the Plesetsk
launch site. To set up a new installation for use to receive the Astra
1G signals would need this sort of equipment:

A small dish (~50cm) with the correct LNB - (in the UK a "Sky dish and LNB"
would be fine) - with either a FTA (free to air) set-top decoder feeding a
normal TV or a DVB satellite box plugged into the back of a computer (either
via a USB port or on a PCI card)

Also required is a clear view from the dish to the satellite and, of course, some coax cable to connect the two!

INTERNET

The ESA launch programme on ASTRA 1G will also be available as a webstream on the Internet. Details have recently changed and will be updated as soon as possible.

SSETI EXPRESS HANDBOOK

To coincide with the launch the SSETI Express Handbook has just been published. Written by Richard Limebear G3RWL, using ESA and AMSAT-UK documentation, the 22 page handbook covers just about every aspect of this exciting new spacecraft. It details AMSAT-UK's involvement in the project and contains a wealth of technical information about the spacecraft and the three Picosats that will be launched from it.

The PDF of the handbook can be downloaded free of charge from the AMSAT-UK website at http://www.uk.amsat.org/ or printed copies are available for £5 inc P&P in Europe from AMSAT-UK, "Badgers", Letton Close, Blandford, Dorset, DT11 7SS, United Kingdom. Tel: +44 (0)1258 453959 Email: g3wgm@amsat.org. Cheques should be made payable to "AMSAT-UK". Postage rates for other parts of the world available on request.

A French version of the handbook translated by Christophe Candebat F1MOJ is also available at the AMSAT-UK web site.

[ANS thanks Graham, UA/G3VZV, and Trevor, M5AKA for the above information]

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SB SAT @ AMSAT $ANS-261.09
SatPC32 V12.4 Tracking Program DDESat32 Download Available

AMSAT News Service Bulletin 261.09
From AMSAT HQ SILVER SPRING, MD.
September 18, 2005
To All RADIO AMATEURS
BID: $ANS-261.09

The new SatPC32 12.4 and Wisat32 12.4 work with the Wisp32 programs without any problem. Users of the tool DDESat32 who have updated to SatPC32 12.4 also need to update DDESat32 because DDESat32 is using some of the auxiliary files and rotor drivers of SatPC32. The DDESat32 update can be downloaded from my website (for free). DDESat32 is a tool that is particularly designed to be used with Wisp32. It is not part of the SatPC32 package and it comes with its own setup program.

Here is the link to download DDESat32:
http://www.dk1tb.de/ddesatsetup_124.zip

DK1TB has generously donated SatPC32 to AMSAT-NA, AMSAT-UK, and AMSAT-DL. If you use SatPC32, please purchase a registration code from one of these groups. All of the purchase price will go to

support amateur satellite programs.

[ANS thanks Erich, DK1TB for the above information]

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SB SAT @ AMSAT $ANS-261.10
AMSAT Awards This Week

AMSAT News Service Bulletin 261.10
From AMSAT HQ SILVER SPRING, MD.
September 18, 2005
To All RADIO AMATEURS
BID: $ANS-261.10

Bruce Paige, KK5DO, AMSAT Director Contests and Awards, reports this week congratulations go out to all of the following.

* Roger Banks, KE5AQD, Satellite Communicators Club

* Andre Theelen, PH7AT, 51 on 51 Award #34

To see all the awards visit http://www.amsat.org

[ANS thanks Bruce, KK5DO for the above information]

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SB SAT @ AMSAT $ANS-261.11
New Release of InstantTune Version 1.50

AMSAT News Service Bulletin 261.11
From AMSAT HQ SILVER SPRING, MD.
September 18, 2005
To All RADIO AMATEURS
BID: $ANS-261.11

Tony, AA2TX, announced a new release of InstantTune which provides automatic radio tuning for use with InstantTrack. He said, "Since it is pretty old (at least for software,) I was not planning on producing anymore "official" releases of this package. However, I have added a few new features based on user requests and decided to offer them to everyone who wants them as a patch release."

The new features are as follows:

1. Velocity Interpolation
InstantTune will estimate a satellite's velocity between actual velocity updates from InstantTrack. This allows it to tune the radios 4x faster than it did before. The doppler shift is noticeable on 70cm downlinks but it really flies on the AO-51 (Echo) S-band downlink.

2. PL control
InstantTune can turn on the PL (CTCSS) encoder and set the tone

frequency for the satellites that require it.

3. Hot Keys
From any InstantTrack screen, you can hit CTRL-B to tune the radio
to the beacon. You can then hit CTRL-Q to return to the previously
tuned QSO frequency. This allows you to quickly check the beacon
and then go back to your QSO.

4. Improved FT-817 driver
The FT-817 driver worked fine when used as a receiver or transmitter
but when used as a single-radio satellite station, the operation was
a bit eratic. The new driver significantly improves this operation
and I was easily able to make a VO-52 SSB contact using just an FT-817
feeding a pair of tripod mounted full wave loop antennas (a pretty
minimal portable, QRP satellite station.)

5. FT857, FT897 support
These radios use the same driver as the FT-817 but you had to know
to type in "ft817" in the config file. InstantTune will now recognize
"ft857" and "ft897" as valid radio types.

The patch release also includes a new "itune.exe" control program
with a few minor improvements not worth mentioning - just type "itune"
at the DOS prompt and it will list all the commands. The new version,
InstantTune Version 1.50, will work with Versions 1.50 or
1.55 of InstantTrack.

If you would like a copy of the patch release with these new features,
send Tony an email via aa2tx at amsat.org.

InstantTune continues to support all of the popular Yaesu, Kenwood,
and ICOM radios as well as any "mic-button" controlled radios. But
note that I don't have access to Kenwood or ICOM radios to test with
so I did not put in the PL control feature for those radio drivers.
If someone would like it added for one of those radios, I will be
happy to implement it as long as they are willing to test it.

As always, InstantTune is truly open source and it is fine with me
if other developers use this source code to help develop new radio
tuning software. If you would like a copy of the latest source code
(mostly C++,) just send Tony an email.

[ANS thanks Tony, AA2TX for the above information]

/EX

73,
This week's ANS Editor,
JoAnne Maenpaa, WB9JEJ
WB9JEJ at amsat dot org

380. WSR-261 AMSAT Weekly Satellite Report

Newsgroup: rec.radio.amateur.space
Date: 2005-09-19 15:29:54 UTC
From: JoAnne Maenpaa <wb9jej_no-spam@earthlink.net>
Message-ID: <SPAXe.478$QE1.402@newsread2.news.atl.earthlink.net>
Source record: 1944

```
This report is organized into 4 parts.
Part 1 - operational analog amateur satellites.
Part 2 - operational digital amateur satellites.
Part 3 - non - operational satellites
Part 4 - proposed satellites

SB SAT @ AMSAT <W8ISS $ANS-261.S1
WSR 261 Part 1 09/18/2005

AMSAT NEWS SERVICE BULLETIN 261.S1 FROM AMSAT HQ
SILVER SPRING, MD, SEPTEMBER 18, 2005
TO ALL RADIO AMATEURS
BID: $ANS-261.S1

VO-52 HAMSAT
Catalog Number: 28650
Launch Date: May 05,2005

Status: On orbit
Current Mode: U/V

Proposed frequencies:
-------------------
Indian transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacom : 145.940MHz continue carier signal

Dutch transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacon : 145.860MHz 12WPM with CW message
[07242005]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - ON
FM REPEATER - V/U

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
Analog voice uplink: 145.880 MHZ FM
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone
```

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

Current scheduled operating modes:

Due to the on going Huricane Katrina Relief Efforts in the Gulf Coast
States,
AO-51 will continue in the default mode V/U with 9k6 Digital, V/U, PBP
BBS
mode. Updated information will be posted as soon as any changes are
made.

[ANS-WSR thanks Bill, VE7WFG for the above information]
[09112005]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz (67.0 Hz PL tone) (See below for operating
procedures)
Downlink: 436.795 MHz

There have been unconfirmed reports on the amsat-bb remailer that SO-50
has
shifted downlink frequency as much as 5khz up. This both from Europe.

To switch the transmitter on, you need to send a CTCSS tone of 74.4
Hz.
The
order of operation is thus: (allow for Doppler as necessary)

1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm
the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT
the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window
will reset the 10 minute timer.
[09122004]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB

Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplink: 145.850 145.870 145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

John, N4QWL reports on July 16th, 2005:

Last evening I had a AOS to LOS qso with WI2W. FO-29 came up at 01:17z here
in FM07 and I found WI2W and we chatted until 01:33z. The satellite was at 2
degrees elevation when I finally heard him start to crackle a bit. What a
great QSO! To think that I watched this bird launch back in 1996 and it is
still working so well is a real thrill. I believe I still have the video. I
might just look for it and watch it again. Boy do I love this satellite
stuff! Look for you all up there.

Please send the reception reports to lab2 'at' jarl.or.jp.
Please use the subject line: 'FO-29 reception report'.

Mineo, JE9PEL, has an FO-29 satellite telemetry analysis program that will
automatically analyze all digital telemetry from the satellite (such as
current, voltage and temperature). FO29CWTE is available at:
http://www.ne.jp/asahi/hamradio/je9pel/
[ANS-WSR wishes to thanks John, N4QWL for this week's report]
[07172005]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

The latest information on AO-27 from control operator Michael Wyrick,
N3UC (former N4USI), can be found at:
http://www.ao27.org

An AO-27 question-and-answer page is available on the AMSAT-NA web
site, with updates by Ray, W2RS. The URL is:
http://www.amsat.org/amsat/intro/ao27faq.html

[ANS-WSR thanks John, K6YK, for this week's AO-27 report]
[08292004]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Semi-operational in sunlight.
Return to active status: June 21,2002

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A
145.975 to 145.925 MHz CW/USB Mode B
Beacon: 29.502 MHz, 145.972 MHz, 435.1 MHz, 2304.1 MHz

Emily, W0EEC has created a website to allow the users of AO-7 to record
contacts, observations and use of the satellite more effectively at:
http://www.emilyshouse.com/experthams/ao7/main.php
This includes the ability to log contacts.

Tim, K3TZ has written a program to decode AO-07 telemetry.
The program can be downloaded at:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

For more AO-7 info:
http://www.amsat.org/amsat/sats/n7hpr/ao7.html
[11142004]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: U/V CROSS-BAND REPEATER
Digipeater: Inactive

The current Expedition 11 crew is:
Commander Sergei Krikalev
Flight Engineer John Phillips

Worldwide packet uplink: 145.990 MHz FM
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM
Doppler Shift is 10 KHz

Russian callsigns: RS0ISS, RZ3DZR
USA callsign: NA1SS
Packet station mailbox callsign: RS0ISS-11
Packet station keyboard callsign: RS0ISS-3

Digipeater callsign: ARISS

This from Frank Bauer, KA3HDO:
The SSTV system will be installed inside the Service module as an integral
part of the ARISS ham radio system. It will transmit and receive (JPG) still images from the International Space Station in a format called Slow
Scan TV (SSTV). When fully operational, the SSTV system is capable of sending up to 480 images per day from ISS. It will also be able to receive images from amateur radio stations on Earth. This system will utilize the already installed Kenwood D-700 radio and the ARISS antennas
mounted on the Service Module. The SSTV equipment flown on Progress 19P
includes the SpaceCam software, a radio/computer interface module, and data
cables. The dedicated laptop for SSTV operations will be launched on a subsequent Progress vehicle

This off the ARISS webpage:
< http://www.rac.ca/ariss/oindex.htm#New%20ARISS%20Operations >:
The ARISS program is pleased to announce that the amateur radio equipment
aboard the International Space Station is now operating in cross-band repeat
mode. We realize that many of you will miss the packet-operating mode. How-
ever, cross-band repeat allows further experimentation of the ISS amateur
radio system

The downlink for this operating mode remains the same, so listen for the station on 145.80 MHz. The new uplink frequency is 437.80 MHz. All freq-uencies are subject to Doppler shifting. For further information on working
satellites and adjusting for Doppler shift, please review Emily Clark's (W0EEC) excellent presentation on AMSAT's website:
http://www.amsat.org/amsat-new/information/faqs/Intro_sats.pdf

The ISS daily crew schedule can be found at:
http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is
NOT translated from Russian and posted.

More information is available at:
http://www.rac.ca/ariss
http://spaceflight.nasa.gov/station/reference/radio/
http://www.marexmg.org/fileshtml/unprotopage.html
http://www.issfanclub.com
http://oscar.dcarr.org/

[09182005]
NNNN
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SB SAT @ AMSAT <W8ISS $ANS-261.S2
WSR 261 Part 2 09/18/2005

AMSAT NEWS SERVICE BULLETIN 261.S2 FROM AMSAT HQ
SILVER SPRING, MD, SEPTEMBER 18, 2005
TO ALL RADIO AMATEURS
BID: $ANS-261.S2

PCSAT2 ?0-??
Catalog Number:
Launch Date: August 1, 2005

Status: Operational

PCSAT2 was installed on the exterior of the International Space
Station and was activated on August 3, 2005.

PCSAT2 CAPABILITIES: PCSAT2 is attached to the ISS and so its operations
must be in cooperation with the ARISS communications suite to minimize
any
mutual interference and to coordinate activities. Here are the
capabilities
of the PCSAT2 and ARISS payloads:

PCSAT SYSTEM A:

435.275 PCSAT2 DOWNLINK 1200 baud packet with uplink on 145.825
435.275 PCSAT2 DOWNLINK Occasional user PSK-31 continuous downlink
145.825 PCSAT2 DOWNLINK 1200 baud packet
PCSAT SYSTEM B:

437.975 PCSAT2 DOWNLINK periodic Solar Cell data and PCSAT2 telemetry at
9600 baud
437.975 PCSAT2 DOWNLINK TNC-B command downlink at 1200 baud
437.975 PCSAT2 DOWNLINK User Voice Repeater with VHF uplink
437.975 PCSAT2 DOWNLINK Packet digipeater with VHF uplink

It looks like PCSAT2 can best contribute at this time by operating in
PSK-31 mode for the near future. This is a very exciting new
transponder
mode which solves the congestion problem on FM repeaters by letting
multiple stations all communicate at the same time.

PSK-31 users are welcome to try out the new PCSAT2 PSK-31 transponder
on ISS with an uplink on 29.402 +/- 1 KHz and downlink on 435.275 +/-
Doppler using FM.

The FM downlink lets everyone operate full duplex and everyone to see
the same view of the passband as everyone else. THus you can see
exactly

what your signal looks like to everyone else.

Help Wanted:

Here is your chance to become a viable part of the Amateur
Satellite Community.

We are looking for a volunteer satellite packet
station in Hawaii that is interested in helping with
telemetry and sat-gating of PCSAT2 and
ARISS packets. Requirements are:

1) General familiarity with packet
2) TNC connected to a cross band radio that
can RX on UHF and TX on VHF.
3) modest UHF beam and rotator system.

Contact WB4APR for more information.

Packets seen from PCSAT2 can be reviewed at:
http://www.findu.com/cgi-bin/pcsat2.cgi

A screen shot of both the 9600 bps and 1200 bps decoded data
as seen by Simon, 9W2QC, can be seen at:
http://www.9w2qc.net/pcsat2/

More information on PCSAT2 can be found at:
http://web.usna.navy.mil/~bruninga/pcsat2.html

[ANS-WSR thanks Bob, WB4APR and the U.S. Naval Academy Satellite Lab for
the aboveinformation.]

[08282005}
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - ON
FM REPEATER - V/U HIGH POWER

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
Analog voice uplink: 145.880 MHz FM
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

Current scheduled operating modes:

Due to the on going Huricane Katrina Relief Efforts in the Gulf Coast States,
AO-51 will continue in the default mode V/U with 9k6 Digital, V/U, PBP BBS
mode. Updated information will be posted as soon as any changes are made.

[ANS-WSR thanks Bill, VE7WFG for the above information]
[09112005]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Non-Operational?????

Uplink/downlink: 145.827 MHz 1200 baud AX.25 AFSK via W3ADO-1
Aux/Uplink: 435.250 MHz 9600 baud via PCSAT-2 (off)
APRS Downlink: 144.390 MHz (Region 2)

PCSat is a 1200-baud APRS digipeater designed for use by stations using hand-held or mobile transceivers. Downlinks feed a central web site at: http://pcsat.aprs.org

The APRS-equipped PCSat was built by midshipmen from the U.S. Naval Academy
under the guidance of Bob Bruninga, WB4APR.
[07242005]
=====
CUTE-1
Catalog number: 27844
Launched: June 30,2003

Status: Operational

Uplink: ?
Downlink: 436.8375 CW
437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)
Cliff, K7RR reports:
In the latest Weekly Satellite Report, CUTE 1, #27844 is listed as OPERATIONAL?
Indeed it is very operational as a CUBESAT sending CW telemetry on
436.8345 MHz. At the July 7 2005, 23:45:20 pass over the Western USA:
CUTE 1 6B A4 xx 7F D7 66A8 4702 FF FF7C 65
CUTE 1 6C A6 59 80 D9 66A8 4702 FF FE7C B6

The June 30th KEPS were within ten seconds of AOS and LOS. It is an very good object to practice tracking as the orbit and transmitter power are similar to proposed CUBESATS awaiting launch this December. As a check

for
Doppler correction, the lack of change in tone is an excellent
indicator.

CUTE 1 is a Japanese (Tokyo Institute of Technology) one kilogram
nanosatellite that was launched by a Rokot rocket from Plesetsk at
14:15 UT on 30 June 2003. It carries a 100 mW beacon at 436.8375 MHz.
Initial orbital parameters were period 101.4 min, apogee 831 km, perigee
819 km, and inclination 98.7?.

For further info about CUTE-1 goto:
http://lss.mes.titech.ac.jp/ssp/cubesat/operation/Schedule_e.html

[ANS WSR wishes to thank Cliff, K7RR, for this week's information]
[07242005]
=====
GO-32 TECHSAT-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
(435.325 n/a - temperature problems)
Uplinks: 145.850, 145.890, 145.930 FM
1269.700, 1269.800, 1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[03132005]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink: 145.850 or 145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz
Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[05152005]
=====

AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for
APRS users.

Uplink: 145.90 145.92 145.94 145.96 MHz FM
(using 1200-baud Manchester FSK)
Downlink: 437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon: 2401.1428 MHz
Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

A WOD collection of current graphics along with general information
and telemetry samples can be found at:
http://www.telecable.es/personales/ea1bcu
[05092004]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational?

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK).
approx. 10 days ON, 10 days OFF
Mode-S Beacon: 2401.500 MHz. ... OFF
UHFBeacon: 435.025 MHz. ... OFF

OSCAR-11 is back! I received the good news, on Saturday morning, while
at the AMSAT-UK Colloquium. This was entirely unexpected! On Sunday
morning Bob G4VRC played me a recording of an early morning pass
received that day.

During the period 21 July to 14 August 2005 consistent signals have been
heard from 30 July to 08 August. Signals seem to be weaker than usual,
confirmed by the many reports received. However,since I last heard the
satellite on 30 April, I've reinstalled my antennas , which makes
comparisons difficult.

Many thanks for all the recent reports of OSCAR-11 including those from
KU7Z (who heard it first), KB2M, VK6XH, HK7MKE, KA2UPW, JE9PEL, G1OCN,
HB9SKA and G8OQW.

All the analogue telemetry channels, 0 to 59 are zero, ie they have
failed. The status channels 60 to 67 are still working. One bit in
channel 62, DSR mode, has changed from WRITE to READ. DSR is the
Digital Store & Readout experiment. This could be significant if the
experiment is still drawing current, but the other status bit indicates
that it is switched OFF.

The on-board clock is now showing a very large error. It has lost approximately 19 days since 30 April. During the recent data collection period, the clock error has been changing at a decreasing rate. The size of the clock error and the rate at which it is changing is similar to the duration of the solar eclipse periods. This suggests that the clock might have been switching OFF during eclipses.

The eclipses have now ended, and the satellite should be in continuous sunlight for the remainder of this year, and well into next year. This should help the satellite to continue transmitting, although continuous sunlight can cause problems due to excessive temperatures.

If the watchdog timer is still operating on a 20 day cycle, ie. approximately ten days ON followed by 10 days OFF, then the VHF beacon should resume transmissions around 18 August.

The Beacon frequencies are -

VHF 145.826 MHz. AFSK FM ASCII Telemetry

UHF 435.025 MHz. OFF

S-band 2401.5 MHz. OFF

Listeners to OSCAR-11 may be interested in visiting my website which contains an archive of news & telemetry data. It also contains details about using a soundcard or hardware demodulators for data capture. There is software for capturing data, and decoding ASCII telemetry. The URL is www.users.zetnet.co.uk/clivew/

If you place this bulletin on a terrestrial packet network, please use the bulletin identifier $BID:U2RPT112.CWV, to prevent duplication.

[ANS-WSR thanks Clive, G3CWV, for the above information]

More information on UO-11 OSCAR-11 can be found at:
http://www.users.zetnet.co.uk/clivew/

MPEG3 files can be found here at Mineo, JE9PEL website:
http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm

[08212005]
NNNN
/EX

SB SAT @ AMSAT <W8ISS $ANS-261.S3
WSR 261 Part 3 09/18/2005

AMSAT NEWS SERVICE BULLETIN 261.S3 FROM AMSAT HQ
SILVER SPRING, MD, SEPTEMBER 18, 2005
TO ALL RADIO AMATEURS
BID: $ANS-261.S3

THE FOLLOWING ARE IN ORBIT BUT ARE
NON-OPERATIONAL AT THIS TIME:

POSAT-1 PO-28
Catalog Number: 22829
Launched : September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 435.250 MHz
435.275 MHz

Uplink: 145.925 MHz
145.975 MHz

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

PO-28 (POSAT-1), Portugal's first satellite, launched 12 years ago, will be turned over to Amateur Radio use in the very near future. That was the word July 30 from AMSAT-UK Secretary Jim Heck, G3WGM, during the AMSAT-UK International Space Colloquium in Guildford, England.

Launched September 25, 1993, the satellite operated as a packet store-and-forward BBS (9600 baud FM FSK) on Amateur Radio frequencies for several
weeks in early 1994. Over the years, PO-28's primary usage has been commer-
cial, although plans have called for eventually shifting its operation to
ham radio use. G3WGM reports that following lengthy negotiations it has been agreed that the satellite can be switched permanently to amateur frequencies. The changeover is expected to take a couple of weeks.

The Portuguese satellite was built at the University of Surrey as part of a
collaborative satellite technology program that involved industry and academe. Uplink frequencies will be 145.925 and 145.975 MHz. Downlink frequencies will be 435.250 and 435.275 MHz. More information on PO-28 is on the AMSAT Web site
http://www.amsat.org/amsat/sats/n7hpr/po28.html.

Uplink Frequencies: 145.925 and 145.975 MHz
Downlink Frequencies: 435.250 and 435.275 MHz

Orbit: 822 x 800 km, 98.6 deg inclined, sun-synchronous.

Transponder capabilities include FM repeater and 38k4 data. If you want to hear how loud this satellite is, listen on 429.950 until the change back
to amateur radio service.

Keplerian elements for PO-28 are not currently contained in the AMSAT keps bulletins, but can be found at Celestrak in amateur.txt using the name "POSAT". Users of Space Track should query the NORAD Satellite ID number 22829. The name listed by Space Track is "EYESAT A".

More information of POSAT-1 can be found at:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
http://www.amsat.org/amsat/sats/n7hpr/po28.html
[ANS-WSR wishes to thanks Trevor, M5AKA and Jim, G3WGM, for this week's information.]
[08072005]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon: 145.810 MHz (unmodulated carrier)

AO-10 has been locked into a Mode-B, 70-cm uplink and
2-meter downlink for several years.

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Non-operational

Uplink: 145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink: 435.812 MHz SSB
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Alberto E. Zagni - I2KBD reports on 02/13/05
The spacecraft is in MBL (safe mode) and is trasmitting just 6 channels of telemetry. Temperatures and voltage are nominal, but there seems to be a problem with the onboard receiver, refusing to accept commands. The spacecraft was launched in 1993, thus nearing 12 years in orbit...

Best regards
Alberto E. Zagni - I2KBD
ITAMSAT Mission Director

More information of IO-26 can be found at:

http://joshua.micronet.it/english/itamsat/itamsathome.html
http://www.amsat.org/amsat/sats/n7hpr/io26.html
www.itamsat.org

[02132005]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089

Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon: 29.408 MHz
Robot: 29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB
Beacon: 145.860 MHz
Robot: 145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB
Beacon: 29.352 MHz (intermittent)

SSB meeting frequency: 29.380 MHz (unofficial)

John, KD6PAG reports on June 16, 2004 to ANS:
RS-15 beacon seemed to be back in the mode where it's a tone about 5
seconds
off and then 5 seconds on this morning.

ANS is looking for more confirmations of RS-15 coming back.

[ANS thanks John, KD6PAG for RS-15 information]
[06202004]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplink: 145.84 145.86 145.88 145.90 MHz FM
(using 1200-baud Manchester FSK)
CW downlink: 437.125 MHz
Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)
Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM
Broadcast Callsign: HLO1-11
BBS: HLO1-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a
non-operational status.
[05092004]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM (9600-baud FSK)
Downlink: 436.500 MHz FM
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink frequency (listed on the PanSat web site) 436.500 MHz

The satellite is not available for general uplink transmissions.

The Naval Postgraduate School developed PanSat. At the time of
launch, PanSat spread-spectrum digital transponders were to
be available to Amateur Radio operators along with software to utilize
this technology.

The satellite is still operating, however, the spread spectrum packet
radio portion never took place. The spacecraft is now beyond it's
initial 2-year mission life, but telemetry records are still being
downloaded.

For more information, visit the official PanSat web site at:
http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS has no further information]
[05232004]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlink: 437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA
web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplink V-band 145.840 - 145.990 MHz CW/LSB
U-band 435.550 - 435.800 MHz CW/LSB
L1-band 1269.250 - 1269.500 MHz CW/LSB
L2-band 1268.325 - 1268.575 MHz CW/LSB
S1-band 2400.350 - 2400.600 MHz CW/LSB
Downlink: S2-band 2401.225 - 2401.475 MHz CW/USB
K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon: 2401.323, 24,048.035
[05232004]

SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational
Downlink: 437.075 MHz
Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz
Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
callsign KE6QMD, as per the user service agreement located at the
following
URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Semi-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

AO-49 (SAFIR-M) is a German amateur radio payload onboard the small
German

scientific satellite "RUBIN-2".

AO-49 was built by the German amateur radio association "AATiS
e.V." (German
acronym for "Arbeitskreis Amateurfunk und Telekommunikation in der
Schule",
which means: 'working group for amateur radio anand telecommunications
in
schools'). AO-49 is designed as a "store and broadcast" system for APRS
based messages, dedicated for the use of schools in combination with the
existing WX-Net and planned buoy experiments in Germany.

No transmissions detected since the 1st of February 2003! It appears
AO-49 is not properly aligned to illuminate the solar panels. This
should end soon. Due to its orbit, AO-49 will be in a phase without
eclipses until 13Feb03.

Martin DG8UAU has written a small software program "SAFIR-M Decoder" to
allow decoding of the received DATA0 frames. It is available at:
http://amend.gmxhome.de in the section Aktuelles.

Details on AO-49 (SAFIR-M) can be found at:
http://amend.gmxhome.de

Information about AATiS e.V. is available at:
http://www.aatis.de
[05092004]
NNNN
/EX

SB SAT @ AMSAT <W8ISS $ANS-261.S4
WSR 261 Part 4 09/18/2005

AMSAT NEWS SERVICE BULLETIN 261.S4 FROM AMSAT HQ
SILVER SPRING, MD, SEPTEMBER 18,2005
TO ALL RADIO AMATEURS
BID: $ANS-261.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE
PROPOSED FOR LAUNCH AT THIS TIME:

UCISAT ?O-??
Catalog number:
Proposed Launch Date: October 31, 2005

Status: Under Construction

Downlink: Submission in Progress
Uplink: Submission in Progress
Callsign: Submission in Progress

This from Matt Bennett, KF6RTB, UCISAT Communications Team Member:

Our website is www.ucisat.net .This is a new website, however, and
doesn't
have the "Status" section active yet. Because of the growing interest in
our
project, I'll push our webmaster to create updates (hopefully) on a
week-to-
week basis. For now, the current status of the mission is as follows:

-Expected Launch Date: October 31st, 2005
-Frequency Allocation: Submission in Progress
-Construction Status: Sub-Assembly
[WSR to thank Matt Bennett, KF6RTB, for this week's report.]
[01302005]
=====
SSETI ?O-??
Catalog Number:
Proposed Launch Date: LATE 2005

Status: AWAITING LAUNCH

Graham, G3VZV reports:
We have now been advised that the revised launch date for SSETI Express
and
the other satellites on the DMC3 COSMOS launch has been confirmed as
September 27th - so please keep those fingers crossed!

SpaceDaily has a report about SSETI at:
http://www.spacedaily.com/news/internet-04zzzu.html

You can find more info about SSETI at:
http://sseti.gte.tuwien.ac.at/WSW4/

Latest news about SSETI can be found at:
http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php

Look at the website for the SSETI Express webcam
http://sseti.gte.tuwien.ac.at/WSW4/webcam.htm

[ANS thanks Graham, G3VZV for the above information]
[09112005]
=====
PHASE 3E ?O-??
Catalog Number:
Proposed Launch Date: Early 2006

Status: Under Construction

William Leijenaar, PE1RAH reports on July 16th, 2005:

Hi AMSATs,

I always like to inform the AMSATs public about my P3e work, but
unfortunatly due to
some reasons there was not much time and nothing much to say...

However, now I am happy to announce that the my MODE-UV transponder design
for P3e is ready at the P3e integration place in Marburg (Germany). About 4
weeks ago I was in Marburg before, where the transponder has been checked.
Unfortunatly some unsure things were found in the design. The unsure things
were about long term stability after many years in space.

At home in The Netherlands, I changed the design with some minor changes to
have a secure long term stability. Finally I tested the transponder again
and it performed well within the specifications. Again something learned for
future transponder designs :o)

Last Wednesday I drove to AMSAT-DL P3e integrations place in Marburg again,
and have my transponder again checked. In the beginning it seemed that the
70cm receiver lost 10dB in sensetivity. After some more measurements we find
out that it was due to a bad attenuator we used for protection at the input.

Together with Karl Meinzer we looked for any problems, but so far we could
see (without HELAPS) all was okay. In the afternoon I went back home again,
this time without the MODE-UV.

Now the MODE-UV will get a new home, the home of P3e... :o)
I hope the transponder will work like its elder sister in AO-10, and you all
will enjoy it for many years...

It was lots of work to get it this far, but I know it is for a good
purpose...

For the latest project status update please visit the AMSAT-DL
P3-E web page:
http://www.amsat-dl.org/p3e/

[ANS-WSR wishes to thank William Leijenaar, PE1RAH for this week's report]
[07172005]
=====
CP1 ?o-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N6CP
Proposed Transmit Frequency: 436.845
[03272005]
=====
CP2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.325
[03272005]
=====
HAUSAT1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: D90HP
Proposed Transmit Frequency: 437.465
[03272005]
=====
ICE Cube 1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: W2CXM
Proposed Transmit Frequency: 437.305
[03272005]
=====
ICE Cube 2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N2VR
Proposed Transmit Frequency: 437.425
[03272005]
=====
ION ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.505
[03272005]
=====
KUTEsat ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: KC0RMW
Proposed Transmit Frequency: 437.385
[03272005]
=====
MEROPE ?O-??

Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: K7MSU-1
Proposed Transmit Frequency: 145.980
[03272005]
=====
nCUBE1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
2407.25
[03272005]
=====
RINCON ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
437.345
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SEEDS ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: JQ1YGU
Proposed Transmit Frequency: 437.485
[03272005]
=====
Mea Huaka ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.405
[03272005]
=====
SUITSAT ?O-??
Catalog Number:
Proposed Release Date: December 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: TBA

To be released from an airlock of the International Space Station some time in
December of 2005.
[09182005]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satelite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

381. www.ukradioamateur 2

Newsgroup: rec.radio.amateur.space
Date: 2005-09-22 00:59:29 UTC
From: Chris I Townsend <chris@cbnr.net>
Message-ID: <+MIA6EgxHgMDFwx7@holmfirth.demon.co.uk>
Source record: 1945

Hi,

2nd post, the first contained an error, the new address should have been given as www.ukradioamateur.co.uk

Some of you, hopefully many of you, may be aware of the existence of the "Amateur Radio Course" project which provides a number on-line and downloadable tutorials for the various UK amateur radio examinations.

Due to the sudden, unexpected and unexplained withdrawal of support by the company who up to now have very kindly hosted our web-site free of charge, and their even more unexpected failure to communicate with me regarding how we might transfer or redirect the URL which they registered for us but now will not let us use, our site is no longer available to the clubs and individuals who benefited from it.

Can you therefore help us and please publicise as widely as possible the following information.

The "Amateur Radio Course" which was located at www.ukradioamateur.org is now relocated at www.ukradioamateur.co.uk

There may be a number of functions that are not working due to the sudden move, but they will be fixed within the next few days.

It remains, as always, a non-profit making activity sponsored and supported entirely by the group of individuals who give up their time and resources free of charge to support and promote interest in the hobby.

I apologise for posting this message in so many newsgroups, but I need the new URL to be publicised as rapidly as possible.

Many thanks to you for your help, best wishes and 73's

Chris
G8PUT

--
Chris I Townsend

(chris@cbnr.net)

382. ANS-268 AMSAT Weekly News Service Bulletin

Newsgroup: rec.radio.amateur.space
Date: 2005-09-28 13:07:05 UTC
From: JoAnne Maenpaa <wb9jej_no-spam@earthlink.net>
Message-ID: <Zzw_e.5328$QE1.4737@newsread2.news.atl.earthlink.net>
Source record: 1946

AMSAT NEWS SERVICE
ANS-268

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* SSETI Express Set to Launch 30 September 2005
* SSETI Express to Deploy Three Cubesats
* Cubesat "XI-V" Reception Reports Requested
* Special Event from Titan Missle Museum
* AO-51 Special Event - JOTA Weekend 15-16 Oct
* Suitsat Video Newsreel
* ARISS Status - 19 September 2005

SB SAT @ AMSAT $ANS-268.01
SSETI Express Set to Launch 30 September 2005

AMSAT News Service Bulletin 268.01
From AMSAT HQ SILVER SPRING, MD.
September 25, 2005
To All RADIO AMATEURS
BID: $ANS-268.01

At long last, official confirmation has been received that the SSETI Express launch is scheduled to take place at 06:52 on September 30th with October 1st as the backup date. SSETI Express will be launching from Plesetsk Cosmodrome on the Cosmos-3M LV

The launch of SSETI Express will be streamed to the Internet thanks to the efforts of Howard Long, G6LVB. The new URL for the Webstream will be http://www.streamingwizard.com/clients/space.asx

The first transmission will occur approximately 65 minutes after separation from the launch adaptor approximately 100 minutes after launch when Express is over northern Europe.

The type of the first transmissions will depend on the state of the battery.

In Nominal mode - a sub 1 second burst of AX25 9k6 FSK telemetry every 18 seconds on the downlink frequency of 437.250 MHz.

In Recovery or Safe mode - simple on/off telemetry comprising 16 x 100 msec carrier pulses. This telemetry is repeated every 30 seconds in Safe Mode and every 2 minutes when in Recovery Mode.

The satellite will transmit at a power of 3 watts.

Reception reports will be welcome by email at operations@sseti.net or by placing them on the SSETI Newsgroup at slave.gte.tuwein.ac.at in the folder "sseti.express.report" where you will also be able to see reports from other locations around the world.

Full information on receiving SSETI Express signals, decoding the telemetry, submitting it to the project team and entering the competition will be posted at:
http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php.

This will have links to all the updated pages as they occur.

AMSAT-UK produce a newsletter "Oscar News" which is full of satellite information.
For membership details contact the secretary Jim Heck G3WGM
Tel: +44 (0)1258 453959
E-mail: g3wgm@amsat.org
Website: http://www.uk.amsat.org/

[ANS thanks Graham, UA/G3VZV and Trevor, M5AKA for the above information]

/EX

SB SAT @ AMSAT $ANS-268.02
SSETI Express to Deploy Three Cubesats

AMSAT News Service Bulletin 268.02
From AMSAT HQ SILVER SPRING, MD.
September 25, 2005
To All RADIO AMATEURS
BID: $ANS-268.02

SSETI Express will be launching from Plesetsk Cosmodrome on the Cosmos-3M LV on September 30, 2005 at 06:52:26 UTC. Satellites that will be launched from Cosmos-3M are Topsat, China DMC and SSETI Express. >From SSETI Express three CubeSats will be deployed: NCUBE-2, UWE-1, and XI-V. This is a great opportunity for everyone in the Cubesat community to use and test their earthstations to track and communicate with the satellites once they are deployed from the LV.

The information regarding the cubesats and their TLEs is located on the CubeSat Website, www.cubesat.org The CubeSat website will contain links to more detailed information and operations about SSETI Express and the CubeSats as well as general information for tracking purposes. The expected TLEs will be posted when the satellites are launched. A

SSETI Express discussion board has been created; you must login-in to
post on the discussion board. Fully functionality of the tools will
occur as the launch approaches.

SSETI Control Center
http://littonlab.atl.calpoly.edu/pages/missions/sseti-express-2005/satellite
-info.php

Test Discussion Board
http://littonlab.atl.calpoly.edu/smf/

[ANS thanks Simon Lee for the above information]

/EX

SB SAT @ AMSAT $ANS-268.03
Cubesat "XI-V" Reception Reports Requested

AMSAT News Service Bulletin 268.03
From AMSAT HQ SILVER SPRING, MD.
September 25, 2005
To All RADIO AMATEURS
BID: $ANS-268.03

The University of Tokyo Intelligent Space Systems Laboratory (ISSL) is
preparing for the launch of their second CubeSat called
"XI-V" (sai-five). XI-V launched with and then separated from SSETI
Express.

The XI-V team would appreciate reception reports of signals from XI-V.
Reports or received data may be sent via email to
xi5report@space.t.u-tokyo.ac.jp or upload any data file through the web
http://www.space.t.u-tokyo.ac.jp/cubesat/upload/xi5report-e.aspx

The specification of the transmitter is as follows:
CW morse-coded signal is on 437.465MHz +/- doppler, output power is 80mW
FM packet of AFSK AX.25 is on 437.345MHz +/- doppler, output power is
800mW.

The details can be seen at
http://www.space.t.u-tokyo.ac.jp/gs/satinfo-e.html#xi5

Although the FM packet will not be transmitted unless commanded by the
ground station at Tokyo, CW signal is always ON, so anyone can receive
it. The format of the CW signal is available at
http://www.space.t.u-tokyo.ac.jp/gs/application-e.html#xi5

Initially the TLE of SSETI Express (provided by Graham) will be adequate
for acquisition as the separation velocity is so small that the
deviation from the orbit of SSETI Express will be negligible for a few
days.

Event Timeline:
Sep 30 06:52:26 (UTC) Launch

Sep 30 08:37:26 (UTC) Separation of XI-V
Sep 30 09:08:00 (UTC) Start of CW transmission
(which will occur over the pacific ocean)

Due to the power limitation, the initial interval of the CW signal is
about 30 seconds, and it will be very difficult to catch its signal. The
XI-V would greatly appreciate help receiving data.
Any format of received data is welcome.

If you have anything to ask, please send email to
cube_info@space.t.u-tokyo.ac.jp

[ANS thanks Ryu Funase for the above information]

/EX

SB SAT @ AMSAT $ANS-268.04
Special Event from Titan Missle Museum

AMSAT News Service Bulletin 268.04
From AMSAT HQ SILVER SPRING, MD.
September 25, 2005
To All RADIO AMATEURS
BID: $ANS-268.04

On October 1, the Green Valley Amateur Radio Club will be conducting a
special event operation from the Titan Missile Museum National Historic
Site, in neighboring Sahuarita, AZ (DM41). While most of the operation
will be on HF, we plan to be on SO-50, and, if the FM transponder is
active at the time, AO-51, using the call N7GV. A special certificate is
available free of charge (SASE please) to anyone working the station.
Please QSL to W0KAD. Further details appear on p. 101 of October QST.

The Titan Missile Museum National Historic Site houses the only
remaining Titan II ICBM, intact in its original silo except for the
propellants and nuclear warhead. The site was operational from 1963 to
1981. The facility is open to visitors daily, with guided tours
available.

[ANS thanks Ray, W2RS for the above information]

/EX

SB SAT @ AMSAT $ANS-268.05
AO-51 Special Event - JOTA Weekend 15-16 Oct

AMSAT News Service Bulletin 268.05
From AMSAT HQ SILVER SPRING, MD.
September 25, 2005
To All RADIO AMATEURS
BID: $ANS-268.05

The annual Boy and Girl Scouts "Jamboree on the Air" Amateur Radio event
is scheduled for 15 and 16 October 2005. As this is an International

Scouting event, amateur radio stations around the world are invited to participate. The AO-51 command team is scheduling the satellite for exclusive use by the Scouts, and Satellite operators communicating with the Scouts, for this weekend. Please allow the Scouts the opportunity to make as many contacts as possible via AO-51 during this short time period. Base stations, please remember that most of the JOTA stations will be portable, so please use minimum power. The official times for the JOTA event will be from 1200 UTC on October 15 until 1200 UTC on October 17, 2005.

For the JOTA weekend, AO-51 will be configured in the Dual FM repeater mode. This will provide two independent FM repeaters (separate uplink and downlink frequencies) for use over the weekend. Both repeaters will be for use by the JOTA activity. This mode will run Monday through Friday before the event to allow amateur satellite stations to familiarize and test this mode. The configuration of the satellite frequencies for this mode is listed below.

AO-51 FM repeater #1
Downlink: 435.300 MHz
Uplink: 145.920 MHz with 67hz PL Tone

AO-51 FM repeater #2
Downlink: 435.150 MHz
Uplink: 145.880 MHz with NO PL Tone

Here are some web links for information on the JOTA weekend activity.
http://www.arrl.org/FandES/ead/jota.html and
http://www.arrl.org/FandES/ead/ideas.html
http://www.scouting.org/international/jota.html

If your local club has a JOTA activity planned for the weekend please consider volunteering your services to provide a satellite communication station for the event.

Thanks for your support and participation.

73, KE4AZN
Echo Command Team
Amsat VP-Operations

[ANS thank Mike KE4AZN for the above information]

/EX

SB SAT @ AMSAT $ANS-268.06
Suitsat Video Newsreel

AMSAT News Service Bulletin 268.06
From AMSAT HQ SILVER SPRING, MD.
September 25, 2005
To All RADIO AMATEURS
BID: $ANS-268.06

Get ready for SuitSat, watch and listen to Frank Bauer, KA3HDO and Mark Steiner, K3MS explain what SuitSat is and what it will do. On the AMSAT website, click on AMSAT VIDEO NEWS then on the Video News page click on SuitSat. You will need Windows Media Player or Mplayer to view the NewsReel.

If you haven't seen the other NewsReels, now would be a great time to see them, or watch them again. They are very informative and highlight the activities of AMSAT.

[ANS thanks Don WB5EKU for the above information]

/EX

SB SAT @ AMSAT $ANS-268.07
ARISS Status - 19 September 2005

AMSAT News Service Bulletin 268.07
From AMSAT HQ SILVER SPRING, MD.
September 25, 2005
To All RADIO AMATEURS
BID: $ANS-268.07

1. NES School Contact Successful

On Friday, September 16, children from the Matthew J. Kuss Middle School in Fall River, Massachusetts, experienced a successful contact with John Phillips, KE5DRY. The amateur radio station was set up in the school library where twelve students asked 22 questions of the astronaut. Two of the students came from Central Park Middle School, another NASA Explorer School (NES), and six of the students (all girls) were amateur radio operators. The audio and video were fed, via amateur radio television, to a nearby church where 100 students, parents, teachers, and local dignitaries gathered to watch.

The event drew a great deal of media attention with television stations including NBC affiliate, WJAR (Channel 10), Fox affiliate WPRI (Channel 12), ABC affiliate WLNE (Channel 6), Comcast Local Channel 9, and Fall River Educational Television (FRED-TV). Newspapers in attendance included the Fall River Spirit and the Fall River Herald News. In addition, the Museum of Science, Boston, was producing a documentary of the school contact.

The Fall River Herald News article, "Long-distance call," may be viewed online. See:
http://www.heraldnews.com/site/news.cfm?newsid=15228976&BRD=1710&PAG=461&dept_id=99784&rfi=8

2. Upcoming School Contacts

Tregaron High School in Tregaron, Ceredigion, Wales, United Kingdom, has been scheduled for an ARISS contact. It will take place on Thursday, September 29 at 11:28 UTC.

3. Upcoming School Contacts with Space Tourist

Space Tourist, Greg Olsen, will fly with the Expedition 12 crew slated to launch on October 1. He plans to make three ARISS contacts during his 8 day visit on board the ISS. The tentative dates and times for these contacts follow.

On Wednesday, October 5 at 16:58 UTC, Olsen will speak to students at Princeton High School in Princeton, New Jersey. The contact will be direct via N2RE.

Students from Fort Hamilton High School in Brooklyn, New York will speak to the space traveler via the telebridge station, VK5ZAI, in Australia. The contact is scheduled for Thursday, October 6 at 15:07 UTC.

Olsen will speak to the students at Ridgefield Park High School in Ridgefield Park, New Jersey via the telebridge station ZS6BTD in South Africa. The contact will take place on Friday, October 7 at 13:32 UTC.

4. ARRL Article on Japan Red Cross Contact

On September 8, the Japan Red Cross Radio Volunteer Corps of Fukui-prefecture, Wakasa Branch, in Obama-City, Fukui-ken, Japan experienced a successful amateur radio contact with astronaut John Phillips, KE5DRY. The ARRL article, "Young Japanese Astronaut Hopefuls Discuss ET, Other Topics," covers the event, and provides links to the audio and video. See:
http://www.arrl.org/news/stories/2005/09/16/6/?nc=1

5. Astronaut Training Status

On Wednesday, September 7, astronaut Sandy Magnus took and passed her amateur radio exam. Her new callsign is KE5FYE. Congratulations, Sandy!

Mission Specialist Bob Behnken attended an amateur radio training class at JSC on Monday, September 12. He is scheduled for another session on September 21 to prepare him for his technician's exam.

6. ARRL Article on SSTV and SuitSat Hardware

ARRL ran a web story covering the new ARISS hardware which was launched September 8, and is now on-orbit. The article, "'SuitSat', New ARISS SSTV Gear Arrives at International Space Station," may be found at:
http://www.arrl.org/news/stories/2005/09/16/2/?nc=1

7. AMSAT and ARISS Joint Meetings, 2006

The 2006 AMSAT-NA Space Symposium will be held in the San Francisco Bay area. ARISS plans to hold its international face to face meeting immediately following the AMSAT-NA conference. The 2006 Symposium planning committee has begun working on next year's meeting and has asked for input. To voice an opinion on hotel and location preferences, go to:
http://www.amsat.org/amsat-new/symposium/survey.php

8. Hams Commended on their Aid at Stennis

A Stennis Space Center facility is serving as the Emergency Operations Center (EOC) for Hancock County, MS; the original EOC was destroyed by Hurricane Katrina. Amateur Radio operator Randy Pierce, AG4UU, from Tallahassee, Florida, is stationed at Stennis, and reports that Amateur Radio operators are serving as communicators for all the services at the EOC, including the fire department and the emergency medical system. Four radio operators are still needed each day. The Amateur Radio operators' technical capabilities have been employed, and the hams were complimented by the Hancock County Sheriff's Office and County Commissioners.

[ANS thanks Carol, KB3LKI for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS
ku4os at amsat dot org

383. WSR-268 AMSAT Weekly Satellite Report

Newsgroup: rec.radio.amateur.space
Date: 2005-09-28 13:08:04 UTC
From: JoAnne Maenpaa <wb9jej_no-spam@earthlink.net>
Message-ID: <UAw_e.5330$QE1.1552@newsread2.news.atl.earthlink.net>
Source record: 1947

```
This report is organized into 4 parts.
Part 1 - operational analog amateur satellites.
Part 2 - operational digital amateur satellites.
Part 3 - non - operational satellites
Part 4 - proposed satellites

SB SAT @ AMSAT <W8ISS $ANS-268.S1
WSR 268 Part 1 09/25/2005

AMSAT NEWS SERVICE BULLETIN 268.S1 FROM AMSAT HQ
SILVER SPRING, MD, SEPTEMBER 25, 2005
TO ALL RADIO AMATEURS
BID: $ANS-268.S1

VO-52 HAMSAT
Catalog Number: 28650
Launch Date: May 05,2005

Status: On orbit
Current Mode: U/V

Proposed frequencies:
-------------------
Indian transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacom : 145.940MHz continue carier signal

Dutch transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacon : 145.860MHz 12WPM with CW message
[07242005]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - ON
FM REPEATER - V/U

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
Analog voice uplink: 145.880 MHZ FM
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone
```

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

Current scheduled operating modes:

26 Sept
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital

AO-51 Special Event - JOTA Weekend 15-16 Oct

The annual Boy and Girl Scouts "Jamboree on the Air" Amateur Radio event is scheduled for 15 and 16 October 2005. As this is an International Scouting event, amateur radio stations around the world are invited to participate. The AO-51 command team is scheduling the satellite for exclusive use by the Scouts, and Satellite operators communicating with the Scouts, for this week-
end. Please allow the Scouts the opportunity to make as many contacts as possible via AO-51 during this short time period. Base stations, please remember that most of the JOTA stations will be portable, so please use minimum power. The official times for the JOTA event will be from 1200 UTC on October
15 until 1200 UTC on October 17, 2005.

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Here are some web links for information on the JOTA weekend activity.
http://www.arrl.org/FandES/ead/jota.html
http://www.arrl.org/FandES/ead/ideas.html
http://www.scouting.org/international/jota.html

If your local club has a JOTA activity planned for the weekend please consider
volunteering your services to provide a satellite communication station for the event.

Thanks for your support and participation.

[ANS-WSR thanks Mike Kingery, KE4AZN for the above information]
[09252005]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz (67.0 Hz PL tone) (See below for operating procedures)
Downlink: 436.795 MHz

There have been unconfirmed reports on the amsat-bb remailer that SO-50 has shifted downlink frequency as much as 5khz up. This both from Europe.

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The
order of operation is thus: (allow for Doppler as necessary)

1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm
the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT
the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window
will reset the 10 minute timer.
[09122004]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplink: 145.850 145.870 145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

John, N4QWL reports on July 16th, 2005:

Last evening I had a AOS to LOS qso with WI2W. FO-29 came up at 01:17z here in FM07 and I found WI2W and we chatted until 01:33z. The satellite was at 2 degrees elevation when I finally heard him start to crackle a bit. What a great QSO! To think that I watched this bird launch back in 1996 and it is still working so well is a real thrill. I believe I still have the video. I might just look for it and watch it again. Boy do I love this satellite stuff! Look for you all up there.

Please send the reception reports to lab2 'at' jarl.or.jp.
Please use the subject line: 'FO-29 reception report'.

Mineo, JE9PEL, has an FO-29 satellite telemetry analysis program that will automatically analyze all digital telemetry from the satellite (such as current, voltage and temperature). FO29CWTE is available at:
http://www.ne.jp/asahi/hamradio/je9pel/
[ANS-WSR wishes to thanks John, N4QWL for this week's report]
[07172005]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

The latest information on AO-27 from control operator Michael Wyrick, N3UC (former N4USI), can be found at:
http://www.ao27.org

An AO-27 question-and-answer page is available on the AMSAT-NA web site, with updates by Ray, W2RS. The URL is:
http://www.amsat.org/amsat/intro/ao27faq.html

[ANS-WSR thanks John, K6YK, for this week's AO-27 report]
[08292004]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Semi-operational in sunlight.
Return to active status: June 21,2002

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A
145.975 to 145.925 MHz CW/USB Mode B
Beacon: 29.502 MHz, 145.972 MHz, 435.1 MHz, 2304.1 MHz

Emily, W0EEC has created a website to allow the users of AO-7 to record contacts, observations and use of the satellite more effectively at:
http://www.emilyshouse.com/experthams/ao7/main.php

This includes the ability to log contacts.

Tim, K3TZ has written a program to decode AO-07 telemetry.
The program can be downloaded at:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

For more AO-7 info:
http://www.amsat.org/amsat/sats/n7hpr/ao7.html
[11142004]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: U/V CROSS-BAND REPEATER
Digipeater: Inactive

The current Expedition 11 crew is:
Commander Sergei Krikalev
Flight Engineer John Phillips

Worldwide packet uplink: 145.990 MHz FM
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM
Doppler Shift is 10 KHz

Russian callsigns: RS0ISS, RZ3DZR
USA callsign: NA1SS
Packet station mailbox callsign: RS0ISS-11
Packet station keyboard callsign: RS0ISS-3
Digipeater callsign: ARISS

This from Frank Bauer, KA3HDO:
The SSTV system will be installed inside the Service module as an integral
part of the ARISS ham radio system. It will transmit and receive (JPG)
still images from the International Space Station in a format called Slow
Scan TV (SSTV). When fully operational, the SSTV system is capable of
sending up to 480 images per day from ISS. It will also be able to
receive images from amateur radio stations on Earth. This system will
utilize the already installed Kenwood D-700 radio and the ARISS antennas
mounted on the Service Module. The SSTV equipment flown on Progress 19P
includes the SpaceCam software, a radio/computer interface module, and data
cables. The dedicated laptop for SSTV operations will be launched on a
subsequent Progress vehicle

This off the ARISS webpage:
< http://www.rac.ca/ariss/oindex.htm#New%20ARISS%20Operations >:
The ARISS program is pleased to announce that the amateur radio equipment

aboard the International Space Station is now operating in cross-band repeat mode. We realize that many of you will miss the packet-operating mode. However, cross-band repeat allows further experimentation of the ISS amateur radio system

The downlink for this operating mode remains the same, so listen for the station on 145.80 MHz. The new uplink frequency is 437.80 MHz. All frequencies are subject to Doppler shifting. For further information on working satellites and adjusting for Doppler shift, please review Emily Clark's (W0EEC) excellent presentation on AMSAT's website:
http://www.amsat.org/amsat-new/information/faqs/Intro_sats.pdf

The ISS daily crew schedule can be found at:
http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.

More information is available at:
http://www.rac.ca/ariss
http://spaceflight.nasa.gov/station/reference/radio/
http://www.marexmg.org/fileshtml/unprotopage.html
http://www.issfanclub.com
http://oscar.dcarr.org/
[09182005]
NNNN
/EX

SB SAT @ AMSAT <W8ISS $ANS-268.S2
WSR 268 Part 2 09/25/2005

AMSAT NEWS SERVICE BULLETIN 268.S2 FROM AMSAT HQ
SILVER SPRING, MD, SEPTEMBER 25, 2005
TO ALL RADIO AMATEURS
BID: $ANS-268.S2

PCSAT2 ?0-??
Catalog Number:
Launch Date: August 1, 2005

Status: Operational

PCSAT2 was installed on the exterior of the International Space Station and was activated on August 3, 2005.

PCSAT2 CAPABILITIES: PCSAT2 is attached to the ISS and so its operations must be in cooperation with the ARISS communications suite to minimize any mutual interference and to coordinate activities. Here are the capabilities of the PCSAT2 and ARISS payloads:

PCSAT SYSTEM A:

435.275 PCSAT2 DOWNLINK 1200 baud packet with uplink on 145.825
435.275 PCSAT2 DOWNLINK Occasional user PSK-31 continuous downlink
145.825 PCSAT2 DOWNLINK 1200 baud packet

PCSAT SYSTEM B:

437.975 PCSAT2 DOWNLINK periodic Solar Cell data and PCSAT2 telemetry at
9600 baud
437.975 PCSAT2 DOWNLINK TNC-B command downlink at 1200 baud
437.975 PCSAT2 DOWNLINK User Voice Repeater with VHF uplink
437.975 PCSAT2 DOWNLINK Packet digipeater with VHF uplink

It looks like PCSAT2 can best contribute at this time by operating in
PSK-31 mode for the near future. This is a very exciting new transponder
mode which solves the congestion problem on FM repeaters by letting
multiple stations all communicate at the same time.

PSK-31 users are welcome to try out the new PCSAT2 PSK-31 transponder
on ISS with an uplink on 29.402 +/- 1 KHz and downlink on 435.275 +/-
Doppler using FM.

The FM downlink lets everyone operate full duplex and everyone to see
the same view of the passband as everyone else. THus you can see exactly
what your signal looks like to everyone else.

Help Wanted:

Here is your chance to become a viable part of the Amateur
Satellite Community.

We are looking for a volunteer satellite packet
station in Hawaii that is interested in helping with
telemetry and sat-gating of PCSAT2 and
ARISS packets. Requirements are:

1) General familiarity with packet
2) TNC connected to a cross band radio that
can RX on UHF and TX on VHF.
3) modest UHF beam and rotator system.

Contact WB4APR for more information.

Packets seen from PCSAT2 can be reviewed at:
http://www.findu.com/cgi-bin/pcsat2.cgi

A screen shot of both the 9600 bps and 1200 bps decoded data
as seen by Simon, 9W2QC, can be seen at:
http://www.9w2qc.net/pcsat2/

More information on PCSAT2 can be found at:
http://web.usna.navy.mil/~bruninga/pcsat2.html

[ANS-WSR thanks Bob, WB4APR and the U.S. Naval Academy Satellite Lab for
the aboveinformation.]

[08282005}
=====
AO-51 ECHO

Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - ON
FM REPEATER - V/U HIGH POWER

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
Analog voice uplink: 145.880 MHz FM
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

Current scheduled operating modes:

26 Sept
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital

AO-51 Special Event - JOTA Weekend 15-16 Oct

The annual Boy and Girl Scouts "Jamboree on the Air" Amateur Radio event is scheduled for 15 and 16 October 2005. As this is an International Scouting event, amateur radio stations around the world are invited to participate. The AO-51 command team is scheduling the satellite for exclusive use by the Scouts, and Satellite operators communicating with the Scouts, for this week-
end. Please allow the Scouts the opportunity to make as many contacts as possible via AO-51 during this short time period. Base stations, please remember that most of the JOTA stations will be portable, so please use minimum power. The official times for the JOTA event will be from 1200 UTC on October
15 until 1200 UTC on October 17, 2005.

For the JOTA weekend, AO-51 will be configured in the Dual FM repeater mode. This will provide two independent FM repeaters (separate uplink and downlink frequencies) for use over the weekend. Both repeaters will be for use by the JOTA activity. This mode will run Monday through Friday before the event to allow amateur satellite stations to familiarize and test this mode. The configuration of the satellite frequencies for this mode is listed below.

AO-51 FM repeater #1
Downlink: 435.300 MHz
Uplink: 145.920 MHz with 67hz PL Tone

AO-51 FM repeater #2
Downlink: 435.150 MHz
Uplink: 145.880 MHz with NO PL Tone

Here are some web links for information on the JOTA weekend activity.
http://www.arrl.org/FandES/ead/jota.html
http://www.arrl.org/FandES/ead/ideas.html
http://www.scouting.org/international/jota.html

If your local club has a JOTA activity planned for the weekend please consider
volunteering your services to provide a satellite communication station for the event.

Thanks for your support and participation.

[ANS-WSR thanks Mike Kingery, KE4AZN for the above information]
[09252005]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Non-Operational?????

Uplink/downlink: 145.827 MHz 1200 baud AX.25 AFSK via W3ADO-1
Aux/Uplink: 435.250 MHz 9600 baud via PCSAT-2 (off)
APRS Downlink: 144.390 MHz (Region 2)

PCSat is a 1200-baud APRS digipeater designed for use by stations using hand-held or mobile transceivers. Downlinks feed a central web site at:
http://pcsat.aprs.org

The APRS-equipped PCSat was built by midshipmen from the U.S. Naval Academy under the guidance of Bob Bruninga, WB4APR.
[07242005]
=====
CUTE-1
Catalog number: 27844
Launched: June 30,2003

Status: Operational

Uplink: ?
Downlink: 436.8375 CW
437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)
Cliff, K7RR reports:
In the latest Weekly Satellite Report, CUTE 1, #27844 is listed as OPERATIONAL?
Indeed it is very operational as a CUBESAT sending CW telemetry on 436.8345 MHz. At the July 7 2005, 23:45:20 pass over the Western USA:

CUTE 1 6B A4 xx 7F D7 66A8 4702 FF FF7C 65
CUTE 1 6C A6 59 80 D9 66A8 4702 FF FE7C B6

The June 30th KEPS were within ten seconds of AOS and LOS. It is an very good object to practice tracking as the orbit and transmitter power are similar to proposed CUBESATS awaiting launch this December. As a check for Doppler correction, the lack of change in tone is an excellent indicator.

CUTE 1 is a Japanese (Tokyo Institute of Technology) one kilogram nanosatellite that was launched by a Rokot rocket from Plesetsk at 14:15 UT on 30 June 2003. It carries a 100 mW beacon at 436.8375 MHz. Initial orbital parameters were period 101.4 min, apogee 831 km, perigee 819 km, and inclination 98.7?.

For further info about CUTE-1 goto:
http://lss.mes.titech.ac.jp/ssp/cubesat/operation/Schedule_e.html

[ANS WSR wishes to thank Cliff, K7RR, for this week's information]
[07242005]
=====
GO-32 TECHSAT-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
(435.325 n/a - temperature problems)
Uplinks: 145.850, 145.890, 145.930 FM
1269.700, 1269.800, 1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[03132005]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink: 145.850 or 145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz
Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to commercial land and weather imaging payloads offers FM and FSK Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as a collaborative effort between the Malaysian government and Surrey

Satellite Technology Ltd.
[05152005]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for
APRS users.

Uplink: 145.90 145.92 145.94 145.96 MHz FM
(using 1200-baud Manchester FSK)
Downlink: 437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon: 2401.1428 MHz
Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

A WOD collection of current graphics along with general information
and telemetry samples can be found at:
http://www.telecable.es/personales/ea1bcu
[05092004]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational?

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK).
approx. 10 days ON, 10 days OFF
Mode-S Beacon: 2401.500 MHz. ... OFF
UHFBeacon: 435.025 MHz. ... OFF

OSCAR-11 is back! I received the good news, on Saturday morning, while
at the AMSAT-UK Colloquium. This was entirely unexpected! On Sunday
morning Bob G4VRC played me a recording of an early morning pass
received that day.

During the period 21 July to 14 August 2005 consistent signals have been
heard from 30 July to 08 August. Signals seem to be weaker than usual,
confirmed by the many reports received. However,since I last heard the
satellite on 30 April, I've reinstalled my antennas , which makes
comparisons difficult.

Many thanks for all the recent reports of OSCAR-11 including those from
KU7Z (who heard it first), KB2M, VK6XH, HK7MKE, KA2UPW, JE9PEL, G1OCN,
HB9SKA and G8OQW.

All the analogue telemetry channels, 0 to 59 are zero, ie they have
failed. The status channels 60 to 67 are still working. One bit in
channel 62, DSR mode, has changed from WRITE to READ. DSR is the
Digital Store & Readout experiment. This could be significant if the
experiment is still drawing current, but the other status bit indicates

that it is switched OFF.

The on-board clock is now showing a very large error. It has lost approximately 19 days since 30 April. During the recent data collection period, the clock error has been changing at a decreasing rate. The size of the clock error and the rate at which it is changing is similar to the duration of the solar eclipse periods. This suggests that the clock might have been switching OFF during eclipses.

The eclipses have now ended, and the satellite should be in continuous sunlight for the remainder of this year, and well into next year. This should help the satellite to continue transmitting, although continuous sunlight can cause problems due to excessive temperatures.

If the watchdog timer is still operating on a 20 day cycle, ie. approximately ten days ON followed by 10 days OFF, then the VHF beacon should resume transmissions around 18 August.

The Beacon frequencies are -

VHF 145.826 MHz. AFSK FM ASCII Telemetry

UHF 435.025 MHz. OFF

S-band 2401.5 MHz. OFF

Listeners to OSCAR-11 may be interested in visiting my website which contains an archive of news & telemetry data. It also contains details about using a soundcard or hardware demodulators for data capture. There is software for capturing data, and decoding ASCII telemetry. The URL is www.users.zetnet.co.uk/clivew/

If you place this bulletin on a terrestrial packet network, please use the bulletin identifier $BID:U2RPT112.CWV, to prevent duplication.

[ANS-WSR thanks Clive, G3CWV, for the above information]

More information on UO-11 OSCAR-11 can be found at:
http://www.users.zetnet.co.uk/clivew/

MPEG3 files can be found here at Mineo, JE9PEL website:
http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm

[08212005]
NNNN
/EX

SB SAT @ AMSAT <W8ISS $ANS-268.S3
WSR 268 Part 3 09/25/2005

AMSAT NEWS SERVICE BULLETIN 268.S3 FROM AMSAT HQ
SILVER SPRING, MD, SEPTEMBER 25, 2005
TO ALL RADIO AMATEURS
BID: $ANS-268.S3

THE FOLLOWING ARE IN ORBIT BUT ARE
NON-OPERATIONAL AT THIS TIME:

POSAT-1 PO-28
Catalog Number: 22829
Launched : September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 435.250 MHz
435.275 MHz

Uplink: 145.925 MHz
145.975 MHz

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

PO-28 (POSAT-1), Portugal's first satellite, launched 12 years ago, will be turned over to Amateur Radio use in the very near future. That was the word July 30 from AMSAT-UK Secretary Jim Heck, G3WGM, during the AMSAT-UK International Space Colloquium in Guildford, England.

Launched September 25, 1993, the satellite operated as a packet store-and-forward BBS (9600 baud FM FSK) on Amateur Radio frequencies for several weeks in early 1994. Over the years, PO-28's primary usage has been commercial, although plans have called for eventually shifting its operation to ham radio use. G3WGM reports that following lengthy negotiations it has been agreed that the satellite can be switched permanently to amateur frequencies. The changeover is expected to take a couple of weeks.

The Portuguese satellite was built at the University of Surrey as part of a collaborative satellite technology program that involved industry and academe. Uplink frequencies will be 145.925 and 145.975 MHz. Downlink frequencies will be 435.250 and 435.275 MHz. More information on PO-28 is on the AMSAT Web site http://www.amsat.org/amsat/sats/n7hpr/po28.html.

Uplink Frequencies: 145.925 and 145.975 MHz
Downlink Frequencies: 435.250 and 435.275 MHz

Orbit: 822 x 800 km, 98.6 deg inclined, sun-synchronous.

Transponder capabilities include FM repeater and 38k4 data. If you want to hear how loud this satellite is, listen on 429.950 until the change back to amateur radio service.

Keplerian elements for PO-28 are not currently contained in the AMSAT keps bulletins, but can be found at Celestrak in amateur.txt using the name "POSAT". Users of Space Track should query the NORAD Satellite ID number 22829. The name listed by Space Track is "EYESAT A".

More information of POSAT-1 can be found at:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
http://www.amsat.org/amsat/sats/n7hpr/po28.html
[ANS-WSR wishes to thanks Trevor, M5AKA and Jim, G3WGM, for this week's

information.]
[08072005]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon: 145.810 MHz (unmodulated carrier)

AO-10 has been locked into a Mode-B, 70-cm uplink and
2-meter downlink for several years.

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Non-operational

Uplink: 145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink: 435.812 MHz SSB
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Alberto E. Zagni - I2KBD reports on 02/13/05
The spacecraft is in MBL (safe mode) and is trasmitting just 6 channels
of telemetry. Temperatures and voltage are nominal, but there seems to
be a problem with the onboard receiver, refusing to accept commands.
The spacecraft was launched in 1993, thus nearing 12 years in orbit...

Best regards
Alberto E. Zagni - I2KBD
ITAMSAT Mission Director

More information of IO-26 can be found at:

http://joshua.micronet.it/english/itamsat/itamsathome.html
http://www.amsat.org/amsat/sats/n7hpr/io26.html
www.itamsat.org

[02132005]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon: 29.408 MHz
Robot: 29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB
Beacon: 145.860 MHz
Robot: 145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB
Beacon: 29.352 MHz (intermittent)
SSB meeting frequency: 29.380 MHz (unofficial)

John, KD6PAG reports on June 16, 2004 to ANS:
RS-15 beacon seemed to be back in the mode where it's a tone about 5 seconds
off and then 5 seconds on this morning.

ANS is looking for more confirmations of RS-15 coming back.

[ANS thanks John, KD6PAG for RS-15 information]
[06202004]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplink: 145.84 145.86 145.88 145.90 MHz FM
(using 1200-baud Manchester FSK)
CW downlink: 437.125 MHz
Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)
Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM
Broadcast Callsign: HLO1-11
BBS: HLO1-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a
non-operational status.
[05092004]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM (9600-baud FSK)
Downlink: 436.500 MHz FM
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink frequency (listed on the PanSat web site) 436.500 MHz

The satellite is not available for general uplink transmissions.

The Naval Postgraduate School developed PanSat. At the time of
launch, PanSat spread-spectrum digital transponders were to
be available to Amateur Radio operators along with software to utilize
this technology.

The satellite is still operating, however, the spread spectrum packet
radio portion never took place. The spacecraft is now beyond it's
initial 2-year mission life, but telemetry records are still being
downloaded.

For more information, visit the official PanSat web site at:
http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS has no further information]
[05232004]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlink: 437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA
web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplink V-band 145.840 - 145.990 MHz CW/LSB
U-band 435.550 - 435.800 MHz CW/LSB
L1-band 1269.250 - 1269.500 MHz CW/LSB
L2-band 1268.325 - 1268.575 MHz CW/LSB
S1-band 2400.350 - 2400.600 MHz CW/LSB
Downlink: S2-band 2401.225 - 2401.475 MHz CW/USB
K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon: 2401.323, 24,048.035
[05232004]

SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational
Downlink: 437.075 MHz
Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]

=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz
Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
callsign KE6QMD, as per the user service agreement located at the following
URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Semi-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

AO-49 (SAFIR-M) is a German amateur radio payload onboard the small German
scientific satellite "RUBIN-2".

AO-49 was built by the German amateur radio association "AATiS
e.V." (German
acronym for "Arbeitskreis Amateurfunk und Telekommunikation in der Schule",
which means: 'working group for amateur radio anand telecommunications in
schools'). AO-49 is designed as a "store and broadcast" system for APRS
based messages, dedicated for the use of schools in combination with the
existing WX-Net and planned buoy experiments in Germany.

No transmissions detected since the 1st of February 2003! It appears
AO-49 is not properly aligned to illuminate the solar panels. This
should end soon. Due to its orbit, AO-49 will be in a phase without
eclipses until 13Feb03.

Martin DG8UAU has written a small software program "SAFIR-M Decoder" to
allow decoding of the received DATA0 frames. It is available at:
http://amend.gmxhome.de in the section Aktuelles.

Details on AO-49 (SAFIR-M) can be found at:
http://amend.gmxhome.de

Information about AATiS e.V. is available at:
http://www.aatis.de
[05092004]
NNNN
/EX

SB SAT @ AMSAT <W8ISS $ANS-268.S4
WSR 268 Part 4 09/25/2005

AMSAT NEWS SERVICE BULLETIN 268.S4 FROM AMSAT HQ
SILVER SPRING, MD, SEPTEMBER 25,2005
TO ALL RADIO AMATEURS
BID: $ANS-268.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE
PROPOSED FOR LAUNCH AT THIS TIME:

UCISAT ?O-??
Catalog number:
Proposed Launch Date: October 31, 2005

Status: Under Construction

Downlink: Submission in Progress
Uplink: Submission in Progress
Callsign: Submission in Progress

This from Matt Bennett, KF6RTB, UCISAT Communications Team Member:

Our website is www.ucisat.net .This is a new website, however, and doesn't
have the "Status" section active yet. Because of the growing interest in our
project, I'll push our webmaster to create updates (hopefully) on a week-to-
week basis. For now, the current status of the mission is as follows:

-Expected Launch Date: October 31st, 2005
-Frequency Allocation: Submission in Progress
-Construction Status: Sub-Assembly
[WSR to thank Matt Bennett, KF6RTB, for this week's report.]
[01302005]
=====
SSETI ?O-??
Catalog Number:
Proposed Launch Date: LATE 2005

Status: AWAITING LAUNCH

Graham, G3VZV reports:
Dear all,

Unfortunately we have just learnt that we have an INDEFINITE launch delay.

This is due to one of the spacecraft on the launch, "SINAH", having suffered a significant failure and not being ready to fly.

Early indications suggest that we have a delay of at least one month, but this is not confirmed.

The launch campaign team will make the spacecraft and the ground support equipment safe and then come home.

This is, of course, very unfortunate, but it is not critical! The spacecraft can easily wait for the new launch date without any significant problems, and we will fly it as soon as we can.

In the meantime please cancel all arrangements for your national launch events.

We'll get there eventually.

Watch this space...

Neil

SpaceDaily has a report about SSETI at:
http://www.spacedaily.com/news/internet-04zzzu.html

You can find more info about SSETI at:
http://sseti.gte.tuwien.ac.at/WSW4/

Latest news about SSETI can be found at:
http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php

Look at the website for the SSETI Express webcam
http://sseti.gte.tuwien.ac.at/WSW4/webcam.htm

[ANS thanks Graham, G3VZV for the above information]
[09252005]
=====
PHASE 3E ?O-??
Catalog Number:
Proposed Launch Date: Early 2006

Status: Under Construction

William Leijenaar, PE1RAH reports on July 16th, 2005:

Hi AMSATs,

I always like to inform the AMSATs public about my P3e work, but unfortunatly due to
some reasons there was not much time and nothing much to say...

However, now I am happy to announce that the my MODE-UV transponder design for P3e is ready at the P3e integration place in Marburg (Germany). About 4 weeks ago I was in Marburg before, where the transponder has been checked. Unfortunatly some unsure things were found in the design. The unsure things were about long term stability after many years in space.

At home in The Netherlands, I changed the design with some minor changes to have a secure long term stability. Finally I tested the transponder again and it performed well within the specifications. Again something learned for future transponder designs :o)

Last Wednesday I drove to AMSAT-DL P3e integrations place in Marburg again, and have my transponder again checked. In the beginning it seemed that the 70cm receiver lost 10dB in sensetivity. After some more measurements we find out that it was due to a bad attenuator we used for protection at the input.

Together with Karl Meinzer we looked for any problems, but so far we could see (without HELAPS) all was okay. In the afternoon I went back home again, this time without the MODE-UV.

Now the MODE-UV will get a new home, the home of P3e... :o)
I hope the transponder will work like its elder sister in AO-10, and you all will enjoy it for many years...

It was lots of work to get it this far, but I know it is for a good purpose...

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/

[ANS-WSR wishes to thank William Leijenaar, PE1RAH for this week's report]
[07172005]
=====
CP1 ?o-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N6CP
Proposed Transmit Frequency: 436.845
[03272005]
=====
CP2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.325
[03272005]
=====
HAUSAT1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: D90HP
Proposed Transmit Frequency: 437.465
[03272005]
=====
ICE Cube 1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: W2CXM
Proposed Transmit Frequency: 437.305
[03272005]
=====
ICE Cube 2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N2VR
Proposed Transmit Frequency: 437.425
[03272005]
=====
ION ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.505
[03272005]
=====
KUTEsat ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: KC0RMW
Proposed Transmit Frequency: 437.385
[03272005]
=====
MEROPE ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: K7MSU-1
Proposed Transmit Frequency: 145.980
[03272005]
=====
nCUBE1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
2407.25
[03272005]
=====

RINCON ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
437.345
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SEEDS ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: JQ1YGU
Proposed Transmit Frequency: 437.485
[03272005]
=====
Mea Huaka ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.405
[03272005]
=====
SUITSAT ?O-??
Catalog Number:
Proposed Release Date: December 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: TBA

To be released from an airlock of the International Space Station some time
in
December of 2005.
[09182005]

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/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satelite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

384. Satellite Imagery and APT Capture Books on Ebay

Newsgroup: rec.radio.amateur.space
Date: 2005-10-03 04:02:37 UTC
From: jstryker2@cox.net
Message-ID: <1128312157.436154.248850@g43g2000cwa.googlegroups.com>
Source record: 1948

For those interested in Weather Satellite Imagery and APT Capture there are several good reference books now listed on Ebay:

Monograph 2-86, Satellite Imagery Interpretation for Forecasters, December 1986, (3 volume set), published by the National Weather Service

Weather Satellite Handbook by Dr. Ralph E. Taggart

Educator's Guide for Building and Operating Environmental Satellite Receiving Stations

Weather Satellites: Systems, Data, and Environmental Applications

385. ANS-275 AMSAT News Service Weekly Bulletin

Newsgroup: rec.radio.amateur.space
Date: 2005-10-03 14:56:59 UTC
From: JoAnne Maenpaa <wb9jej_no-spam@earthlink.net>
Message-ID: <%Eb0f.7881$QE1.458@newsread2.news.atl.earthlink.net>
Source record: 1949

AMSAT NEWS SERVICE
ANS-275

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* AMSAT BoD, Annual Meeting, and Eagle Satellite Team Meeting
* SSETI Launch Delay
* ARISS Status
* AMSAT AWARDS This Week
* ISS Status Report
* Solar Eclipse, an eye feast
* Delphi-C3 newsletter available
* Informal MSN Chat Group For ISS and PCSAT2
* Amateur Radio Operators Copy MRO at 14 Million Kilometers Distance

SB SAT @ AMSAT $ANS-275.01
AMSAT BoD, Annual Meeting, and Eagle Satellite Team Meeting

AMSAT News Service Bulletin 275.01
From AMSAT HQ SILVER SPRING, MD.
October 2, 2005
To All RADIO AMATEURS
BID: $ANS-275.01

Rick Hambly, W2GPS, AMSAT-NA President, reminds all members that the 2005 AMSAT Board of Directors Meeting will be held on Thursday, October 6th and ending at noon on Friday, October 7th. The AMSAT Annual Meeting will follow later on Friday. An Eagle satellite design team meeting will follow on Friday afternoon through Sunday morning, October 7th through the 9th. These are open meetings and all AMSAT members and guests are invited to attend. We are staying at the Wyndham Pittsburgh Airport Hotel located near the Pittsburgh International Airport. The phone number of the hotel is 412-788-8800.

[ANS thanks Rick, W2GPS for the above information]

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SB SAT @ AMSAT $ANS-275.02
SSETI Launch Delay

AMSAT News Service Bulletin 275.02
From AMSAT HQ SILVER SPRING, MD.
October 2, 2005
To All RADIO AMATEURS
BID: $ANS-275.02

Unfortunately, the SSETI team has learned this past week that
they have an INDEFINITE launch delay.

This is due to one of the spacecraft on the launch, "SINAH",
having suffered a significant failure and not being ready to
fly.

Early indications suggest that a delay of at least one month may
be expected, but this has not been confirmed at press time.

The SSETI launch campaign team will make the spacecraft and the
ground support equipment safe and then return to the UK.

This is, of course, very unfortunate, but it is not critical!
The spacecraft can easily wait for the new launch date without
any significant problems, with the SSETI team looking forward to
liftoff and orbit as soon as can be done.

[ANS thanks Graham, UA/G3VZV for the above information]

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SB SAT @ AMSAT $ANS-275.03
ARISS Status

AMSAT News Service Bulletin 275.03
From AMSAT HQ SILVER SPRING, MD.
October 2, 2005
To All RADIO AMATEURS
BID: $ANS-275.03

1. Upcoming School Contacts with Space Tourist
Space Tourist Greg Olsen will fly with the Expedition 12 crew slated to
launch on October 1. He plans to make three ARISS contacts during his 8
day visit on board the ISS. The tentative dates and times for these
contacts follow.
On Wednesday, October 5 at 16:58 UTC, Olsen will speak to students at
Princeton High School in Princeton, New Jersey. [Note change]-This
contact will not be direct but will be a telebridge via NN1SS.

Students from Fort Hamilton High School in Brooklyn, New York will speak
to the space traveler via the telebridge station,VK5ZAI, in Australia.
The contact is scheduled for Thursday, October 6 at 15:07 UTC.

Olsen will speak to the students at Ridgefield Park High School in
Ridgefield Park, New Jersey via the telebridge station, ZS6BTD, in South

Africa. The contact will take place on Friday, October 7 at 13:32 UTC.

2. SuitSat Video

A video covering the SuitSat project is available on the AMSAT website.
See: http://www.amsat.org/amsat-new/information/videoNews.php

3. AMSAT 2005 Meetings

The 2005 AMSAT Board of Directors Meeting will be held on Thursday and Friday, October 6 - 7 at the Wyndham Pittsburgh Airport Hotel. This conference will be followed by both the AMSAT Annual Meeting, and the Eagle satellite team meeting which will be held on Friday afternoon through Sunday morning, October 7 - 9.

4. Astronaut Training Status

Mission Specialist Bob Behnken completed two sessions of amateur radio training at JSC. He is currently preparing to take his technician's exam.

[ANS Thanks Carol, KB3LKI, for this information]

SB SAT @ AMSAT $ANS-275.04
AMSAT Awards

AMSAT News Service Bulletin 275.04
From AMSAT HQ SILVER SPRING, MD.
October 2, 2005
To All RADIO AMATEURS
BID: $ANS-275.04

This week, congrats go out to all of the following.

Phillip Crawford, W9DQ, Satellite Communication Achievement Award #421
and South Africa AMSAT Satellite Communication Achievement Award #US90

To see all the awards visit http://www.amsat.org or http://www.amsatnet.com

73...bruce

[ANS Thanks Bruce Paige, KK5DO, for this information]

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SB SAT @ AMSAT $ANS-275.05
ISS Status Report

AMSAT News Service Bulletin 275.05
From AMSAT HQ SILVER SPRING, MD.
October 2, 2005
To All RADIO AMATEURS
BID: $ANS-275.05

International Space Station Status Report #05-46
9 a.m. CDT Friday, Sept. 30, 2005
Expedition 11 Crew

Preparations for arrival of the next crew of the space station, scientific activities and maintenance highlighted this week's activities aboard the orbiting laboratory.

Expedition 11 Commander Sergei Krikalev and NASA Science Officer John Phillips also spent some time packing up for their own return home, readying their launch and entry suits. They checked out the Soyuz spacecraft that brought them to the station April 16 to make sure it is ready to take them back to Earth.

The 12th crew of the station, Commander and NASA Science Officer William McArthur and Valery Tokarev, flight engineer and Soyuz commander, are scheduled to launch from the Baikonur Cosmodrome in Kazakhstan tonight at about 10:55 p.m. CDT. NASA Television coverage of the launch will begin at 10p.m.

The new crew is scheduled to dock with the station a little after 12:30 a.m. on Monday. NASA Television coverage of the docking will begin at 1 1p.m.Sunday.

With the Expedition 12 crew will be spaceflight participant Gregory Olsen, an American businessman traveling to the station under a contract with the Russian Federal Space Agency. He will spend about eight days on the station and return to Earth with Krikalev and Phillips. Their landing is scheduled for about 8:10 p.m. CDT Oct. 10 on the steppes of Kazakhstan.

Thursday managers at Mission Control Moscow said launch preparations were moving along flawlessly. Managers at Mission Control Houston said the station was ready to receive the new crew.

McArthur and Tokarev will spend the eight days they will share with their predecessors aboard the station in intensive handover briefings, learning about the spacecraft's systems, processes, procedures, scientific experiments, the location of equipment and supplies. In short, they will be trying to learn all they still need to know before they begin their months in orbit alone.

Krikalev and Phillips began the week with NASA flight controllers in Moscow exercising primary mission control. Mission Control Houston and the rest of Johnson Space Center were closed because of the threat of Hurricane Rita. Houston flight controllers resumed normal operations at 9 a.m. Monday.

On Tuesday Krikalev and Phillips each spent more than an hour familiarizing themselves with Olsen's scientific experiments. On Wednesday they continued preparations for arrival of the new crew, and on Thursday did predocking tests and more preparation for their own departure. Phillips regenerated METOX carbon dioxide absorbing cartridges for U.S. spacesuits. McArthur and Tokarev have a spacewalk scheduled in those suits in November.

Today's schedule includes maintenance of the Elektron oxygen generating system, functioning again after Krikalev replaced its liquids unit two

weeks ago.

For information on the crew's activities aboard the station, future launch dates, and station sighting opportunities from anywhere on the Earth, visit:

http://www.nasa.gov/station

The next station status report will be issued this evening, after the Expedition 12 launch.

[ANS Thanks Arthur, N1ORC for this information]

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SB SAT @ AMSAT $ANS-275.06
Solar Eclipse

AMSAT News Service Bulletin 275.06
From AMSAT HQ SILVER SPRING, MD.
October 2, 2005
To All RADIO AMATEURS
BID: $ANS-275.06
Solar Eclipse

On Monday October 3, 2005, there will be a solar eclipse encompassing Europe, Asia & most of Africa. It will start early am and move across the continents rather quickly. There are many web sites with exact information and you should search for them to obtain this data. These are natural phenomena's that are spectacular and a miraculous thing to observe. If you are lucky enough to be in this path, you'll begin to understand what happens when a satellite is in "eclipse!"

[ANS thanks Dee, NB2F for the above information]

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SB SAT @ AMSAT $ANS-275.07
Delfi-C3 Newsletter Available

AMSAT News Service Bulletin 275.07
From AMSAT HQ SILVER SPRING, MD.
October 2, 2005
To All RADIO AMATEURS
BID: $ANS-275.07

The latest edition of the Delfi-C3 Newsletter is available on-line. Delfi-C3 is a cubesat project being built by aerospace engineering students and professors at Aerospace Engineering at Delft University of Technology in the Netherlands.

Interested amateur radio operators can subscribe to the newsletter: http://www.delfic3.nl/newsletter/

Full coverage of the Delfi-C3 project is on-line at:
http://www.delfic3.nl

[ANS thanks the Delfi-C3 team for the above information]

/EX

SB SAT @ AMSAT $ANS-275.08
Informal MSN Chat Group For ISS and PCSAT2

AMSAT News Service Bulletin 275.08
From AMSAT HQ SILVER SPRING, MD.
October 2, 2005
To All RADIO AMATEURS
BID: $ANS-275.08

Cor, PD0RKC, invites amateur radio operators who are interested in
ISS and PCSAT2 activity to join his informal chat group at
http://www.msn.com.

Discussions include ISS activity, trackings-aprs-packet-software,
and ISS news. For more details about this group contact Cor at his
MSN e-mail address: isszarya (at) hotmail.com.

[ANS thanks Cor, PD0RKC for the above information]

/EX

SB SAT @ AMSAT $ANS-275.09
Amateur Radio Operators Copy MRO at 14 Million Kilometers Distance

AMSAT News Service Bulletin 275.09
From AMSAT HQ SILVER SPRING, MD.
October 2, 2005
To All RADIO AMATEURS
BID: $ANS-275.09

The Mars Reconnaisance Orbiter, presently enroute to Mars in an
interplanetary orbit 14 million kilometers from Earth, activated
its Electra UHF Relay system operating at 437.1 MHz on September 21
and September 22. Andy, N9AB successfully detected this weak signal
using his amateur radio station and DSP software to perform FFT
analysis.

Andy has written a very nice report on his detection of MRO which can
be found on-line at:
http://members.verizon.net/~km1p/N9AB_MRO_Report.pdf

Viktor, OE1VKW reports his success at receiving the MRO at:
http://cacofonix.nt.tuwien.ac.at/~oe1vkw/MRO/rcv22905.htm

[ANS Andy, N9AB, Joe, KM1P, and Viktor, OE1VKW for the above information]

/EX

73,
This week's ANS Editor,
Dee Interdonato, NB2F
NB2F at amsat dot org

386. WSR-275 AMSAT Weekly Satellite Report

Newsgroup: rec.radio.amateur.space
Date: 2005-10-03 14:58:07 UTC
From: JoAnne Maenpaa <wb9jej_no-spam@earthlink.net>
Message-ID: <3Gb0f.7882$QE1.2156@newsread2.news.atl.earthlink.net>
Source record: 1850

```
This report is organized into 4 parts.
Part 1 - operational analog amateur satellites.
Part 2 - operational digital amateur satellites.
Part 3 - non - operational satellites
Part 4 - proposed satellites

SB SAT @ AMSAT <W8ISS $ANS-275.S1
WSR 275 Part 1 10/02/2005

AMSAT NEWS SERVICE BULLETIN 275.S1 FROM AMSAT HQ
SILVER SPRING, MD, OCTOBER 02, 2005
TO ALL RADIO AMATEURS
BID: $ANS-275.S1

VO-52 HAMSAT
Catalog Number: 28650
Launch Date: May 05,2005

Status: Testing
Current Mode: U/V

Proposed frequencies:
-------------------
Indian transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacom : 145.940MHz continue carier signal

Dutch transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacon : 145.860MHz 12WPM with CW message
[07242005]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - ON
FM REPEATER - V/U

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
Analog voice uplink: 145.880 MHZ FM
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone
```

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

Current scheduled operating modes:

26 Sept
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital

AO-51 Special Event - JOTA Weekend 15-16 Oct

The annual Boy and Girl Scouts "Jamboree on the Air" Amateur Radio event is
scheduled for 15 and 16 October 2005. As this is an International Scouting
event, amateur radio stations around the world are invited to participate.
The AO-51 command team is scheduling the satellite for exclusive use by the
Scouts, and Satellite operators communicating with the Scouts, for this week-
end. Please allow the Scouts the opportunity to make as many contacts as
possible via AO-51 during this short time period. Base stations, please rem-
ember that most of the JOTA stations will be portable, so please use minimum
power. The official times for the JOTA event will be from 1200 UTC on October
15 until 1200 UTC on October 17, 2005.

For the JOTA weekend, AO-51 will be configured in the Dual FM repeater mode.
This will provide two independent FM repeaters (separate uplink and downlink
frequencies) for use over the weekend. Both repeaters will be for use by the
JOTA activity. This mode will run Monday through Friday before the event to
allow amateur satellite stations to familiarize and test this mode. The con-
figuration of the satellite frequencies for this mode is listed below.

AO-51 FM repeater #1
Downlink: 435.300 MHz

Uplink: 145.920 MHz with 67hz PL Tone

AO-51 FM repeater #2
Downlink: 435.150 MHz
Uplink: 145.880 MHz with NO PL Tone

Here are some web links for information on the JOTA weekend activity.
http://www.arrl.org/FandES/ead/jota.html
http://www.arrl.org/FandES/ead/ideas.html
http://www.scouting.org/international/jota.html

If your local club has a JOTA activity planned for the weekend please consider
volunteering your services to provide a satellite communication station for
the event.

Thanks for your support and participation.

[ANS-WSR thanks Mike Kingery, KE4AZN for the above information]
[09252005]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz (67.0 Hz PL tone) (See below for operating procedures)
Downlink: 436.795 MHz

There have been unconfirmed reports on the amsat-bb remailer that SO-50 has
shifted downlink frequency as much as 5khz up. This both from Europe.

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The
order of operation is thus: (allow for Doppler as necessary)

1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm
the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT
the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window
will reset the 10 minute timer.
[09122004]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplink: 145.850 145.870 145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

John, N4QWL reports on July 16th, 2005:

Last evening I had a AOS to LOS qso with WI2W. FO-29 came up at 01:17z here
in FM07 and I found WI2W and we chatted until 01:33z. The satellite was at 2
degrees elevation when I finally heard him start to crackle a bit. What a
great QSO! To think that I watched this bird launch back in 1996 and it is
still working so well is a real thrill. I believe I still have the video. I
might just look for it and watch it again. Boy do I love this satellite
stuff! Look for you all up there.

Please send the reception reports to lab2 'at' jarl.or.jp.
Please use the subject line: 'FO-29 reception report'.

Mineo, JE9PEL, has an FO-29 satellite telemetry analysis program that will
automatically analyze all digital telemetry from the satellite (such as
current, voltage and temperature). FO29CWTE is available at:
http://www.ne.jp/asahi/hamradio/je9pel/
[ANS-WSR wishes to thanks John, N4QWL for this week's report]
[07172005]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

The latest information on AO-27 from control operator Michael Wyrick,
N3UC (former N4USI), can be found at:
http://www.ao27.org

An AO-27 question-and-answer page is available on the AMSAT-NA web
site, with updates by Ray, W2RS. The URL is:
http://www.amsat.org/amsat/intro/ao27faq.html

[ANS-WSR thanks John, K6YK, for this week's AO-27 report]
[08292004]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Semi-operational in sunlight.
Return to active status: June 21,2002

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A
145.975 to 145.925 MHz CW/USB Mode B
Beacon: 29.502 MHz, 145.972 MHz, 435.1 MHz, 2304.1 MHz

Emily, W0EEC has created a website to allow the users of AO-7 to record
contacts, observations and use of the satellite more effectively at:
http://www.emilyshouse.com/experthams/ao7/main.php
This includes the ability to log contacts.

Tim, K3TZ has written a program to decode AO-07 telemetry.
The program can be downloaded at:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

For more AO-7 info:
http://www.amsat.org/amsat/sats/n7hpr/ao7.html
[11142004]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: U/V CROSS-BAND REPEATER
Digipeater: Inactive

The current Expedition 11 crew is:
Commander Sergei Krikalev
Flight Engineer John Phillips

Worldwide packet uplink: 145.990 MHz FM
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM
Doppler Shift is 10 KHz

Russian callsigns: RS0ISS, RZ3DZR
USA callsign: NA1SS
Packet station mailbox callsign: RS0ISS-11
Packet station keyboard callsign: RS0ISS-3

Digipeater callsign: ARISS

This from Frank Bauer, KA3HDO:
The SSTV system will be installed inside the Service module as an integral
part of the ARISS ham radio system. It will transmit and receive (JPG) still images from the International Space Station in a format called Slow
Scan TV (SSTV). When fully operational, the SSTV system is capable of sending up to 480 images per day from ISS. It will also be able to receive images from amateur radio stations on Earth. This system will utilize the already installed Kenwood D-700 radio and the ARISS antennas
mounted on the Service Module. The SSTV equipment flown on Progress 19P
includes the SpaceCam software, a radio/computer interface module, and data
cables. The dedicated laptop for SSTV operations will be launched on a subsequent Progress vehicle

This off the ARISS webpage:
< http://www.rac.ca/ariss/oindex.htm#New%20ARISS%20Operations >:
The ARISS program is pleased to announce that the amateur radio equipment
aboard the International Space Station is now operating in cross-band repeat
mode. We realize that many of you will miss the packet-operating mode. How-
ever, cross-band repeat allows further experimentation of the ISS amateur
radio system

The downlink for this operating mode remains the same, so listen for the station on 145.80 MHz. The new uplink frequency is 437.80 MHz. All freq-uencies are subject to Doppler shifting. For further information on working
satellites and adjusting for Doppler shift, please review Emily Clark's (W0EEC) excellent presentation on AMSAT's website:
http://www.amsat.org/amsat-new/information/faqs/Intro_sats.pdf

The ISS daily crew schedule can be found at:
http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is
NOT translated from Russian and posted.

More information is available at:
http://www.rac.ca/ariss
http://spaceflight.nasa.gov/station/reference/radio/
http://www.marexmg.org/fileshtml/unprotopage.html
http://www.issfanclub.com
http://oscar.dcarr.org/

[09182005]
NNNN
/EX

SB SAT @ AMSAT <W8ISS $ANS-275.S2
WSR 275 Part 2 10/02/2005

AMSAT NEWS SERVICE BULLETIN 275.S2 FROM AMSAT HQ
SILVER SPRING, MD, OCTOBER 02, 2005
TO ALL RADIO AMATEURS
BID: $ANS-275.S2

PCSAT2 ?0-??
Catalog Number:
Launch Date: August 1, 2005

Status: Operational

PCSAT2 was installed on the exterior of the International Space
Station and was activated on August 3, 2005.

PCSAT2 CAPABILITIES: PCSAT2 is attached to the ISS and so its operations
must be in cooperation with the ARISS communications suite to minimize
any
mutual interference and to coordinate activities. Here are the
capabilities
of the PCSAT2 and ARISS payloads:

PCSAT SYSTEM A:

435.275 PCSAT2 DOWNLINK 1200 baud packet with uplink on 145.825
435.275 PCSAT2 DOWNLINK Occasional user PSK-31 continuous downlink
145.825 PCSAT2 DOWNLINK 1200 baud packet
PCSAT SYSTEM B:

437.975 PCSAT2 DOWNLINK periodic Solar Cell data and PCSAT2 telemetry at
9600 baud
437.975 PCSAT2 DOWNLINK TNC-B command downlink at 1200 baud
437.975 PCSAT2 DOWNLINK User Voice Repeater with VHF uplink
437.975 PCSAT2 DOWNLINK Packet digipeater with VHF uplink

It looks like PCSAT2 can best contribute at this time by operating in
PSK-31 mode for the near future. This is a very exciting new
transponder
mode which solves the congestion problem on FM repeaters by letting
multiple stations all communicate at the same time.

PSK-31 users are welcome to try out the new PCSAT2 PSK-31 transponder
on ISS with an uplink on 29.402 +/- 1 KHz and downlink on 435.275 +/-
Doppler using FM.

The FM downlink lets everyone operate full duplex and everyone to see
the same view of the passband as everyone else. THus you can see
exactly

what your signal looks like to everyone else.

Help Wanted:

Here is your chance to become a viable part of the Amateur
Satellite Community.

We are looking for a volunteer satellite packet
station in Hawaii that is interested in helping with
telemetry and sat-gating of PCSAT2 and
ARISS packets. Requirements are:

1) General familiarity with packet
2) TNC connected to a cross band radio that
can RX on UHF and TX on VHF.
3) modest UHF beam and rotator system.

Contact WB4APR for more information.

Packets seen from PCSAT2 can be reviewed at:
http://www.findu.com/cgi-bin/pcsat2.cgi

A screen shot of both the 9600 bps and 1200 bps decoded data
as seen by Simon, 9W2QC, can be seen at:
http://www.9w2qc.net/pcsat2/

More information on PCSAT2 can be found at:
http://web.usna.navy.mil/~bruninga/pcsat2.html

[ANS-WSR thanks Bob, WB4APR and the U.S. Naval Academy Satellite Lab for
the aboveinformation.]

[08282005}
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - ON
FM REPEATER - V/U HIGH POWER

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
Analog voice uplink: 145.880 MHz FM
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

Current scheduled operating modes:

26 Sept
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital

AO-51 Special Event - JOTA Weekend 15-16 Oct

The annual Boy and Girl Scouts "Jamboree on the Air" Amateur Radio event is
scheduled for 15 and 16 October 2005. As this is an International Scouting
event, amateur radio stations around the world are invited to participate.
The AO-51 command team is scheduling the satellite for exclusive use by the
Scouts, and Satellite operators communicating with the Scouts, for this week-
end. Please allow the Scouts the opportunity to make as many contacts as
possible via AO-51 during this short time period. Base stations, please rem-
ember that most of the JOTA stations will be portable, so please use minimum
power. The official times for the JOTA event will be from 1200 UTC on October
15 until 1200 UTC on October 17, 2005.

For the JOTA weekend, AO-51 will be configured in the Dual FM repeater mode.
This will provide two independent FM repeaters (separate uplink and downlink
frequencies) for use over the weekend. Both repeaters will be for use by the
JOTA activity. This mode will run Monday through Friday before the event to
allow amateur satellite stations to familiarize and test this mode. The con-
figuration of the satellite frequencies for this mode is listed below.

AO-51 FM repeater #1
Downlink: 435.300 MHz
Uplink: 145.920 MHz with 67hz PL Tone

AO-51 FM repeater #2
Downlink: 435.150 MHz
Uplink: 145.880 MHz with NO PL Tone

Here are some web links for information on the JOTA weekend activity.
http://www.arrl.org/FandES/ead/jota.html
http://www.arrl.org/FandES/ead/ideas.html
http://www.scouting.org/international/jota.html

If your local club has a JOTA activity planned for the weekend please consider
volunteering your services to provide a satellite communication station for
the event.

Thanks for your support and participation.

[ANS-WSR thanks Mike Kingery, KE4AZN for the above information]
[09252005]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Non-Operational?????

Uplink/downlink: 145.827 MHz 1200 baud AX.25 AFSK via W3ADO-1
Aux/Uplink: 435.250 MHz 9600 baud via PCSAT-2 (off)
APRS Downlink: 144.390 MHz (Region 2)

PCSat is a 1200-baud APRS digipeater designed for use by stations using
hand-held or mobile transceivers. Downlinks feed a central web site at:
http://pcsat.aprs.org

The APRS-equipped PCSat was built by midshipmen from the U.S. Naval Academy
under the guidance of Bob Bruninga, WB4APR.
[07242005]
=====
CUTE-1
Catalog number: 27844
Launched: June 30,2003

Status: Operational

Uplink: ?
Downlink: 436.8375 CW
437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)
Cliff, K7RR reports:
In the latest Weekly Satellite Report, CUTE 1, #27844 is listed as
OPERATIONAL?
Indeed it is very operational as a CUBESAT sending CW telemetry on
436.8345 MHz. At the July 7 2005, 23:45:20 pass over the Western USA:
CUTE 1 6B A4 xx 7F D7 66A8 4702 FF FF7C 65
CUTE 1 6C A6 59 80 D9 66A8 4702 FF FE7C B6

The June 30th KEPS were within ten seconds of AOS and LOS. It is an very
good object to practice tracking as the orbit and transmitter power are

similar to proposed CUBESATS awaiting launch this December. As a check
for
Doppler correction, the lack of change in tone is an excellent
indicator.

CUTE 1 is a Japanese (Tokyo Institute of Technology) one kilogram
nanosatellite that was launched by a Rokot rocket from Plesetsk at
14:15 UT on 30 June 2003. It carries a 100 mW beacon at 436.8375 MHz.
Initial orbital parameters were period 101.4 min, apogee 831 km, perigee
819 km, and inclination 98.7?.

For further info about CUTE-1 goto:
http://lss.mes.titech.ac.jp/ssp/cubesat/operation/Schedule_e.html

[ANS WSR wishes to thank Cliff, K7RR, for this week's information]
[07242005]
=====
GO-32 TECHSAT-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
(435.325 n/a - temperature problems)
Uplinks: 145.850, 145.890, 145.930 FM
1269.700, 1269.800, 1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[03132005]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink: 145.850 or 145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz
Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[05152005]

=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for
APRS users.

Uplink: 145.90 145.92 145.94 145.96 MHz FM
(using 1200-baud Manchester FSK)
Downlink: 437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon: 2401.1428 MHz
Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

A WOD collection of current graphics along with general information
and telemetry samples can be found at:
http://www.telecable.es/personales/ea1bcu
[05092004]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational?

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK).
approx. 10 days ON, 10 days OFF
Mode-S Beacon: 2401.500 MHz. ... OFF
UHFBeacon: 435.025 MHz. ... OFF

OSCAR-11 is back! I received the good news, on Saturday morning, while
at the AMSAT-UK Colloquium. This was entirely unexpected! On Sunday
morning Bob G4VRC played me a recording of an early morning pass
received that day.

During the period 21 July to 14 August 2005 consistent signals have been
heard from 30 July to 08 August. Signals seem to be weaker than usual,
confirmed by the many reports received. However,since I last heard the
satellite on 30 April, I've reinstalled my antennas , which makes
comparisons difficult.

Many thanks for all the recent reports of OSCAR-11 including those from
KU7Z (who heard it first), KB2M, VK6XH, HK7MKE, KA2UPW, JE9PEL, G1OCN,
HB9SKA and G8OQW.

All the analogue telemetry channels, 0 to 59 are zero, ie they have
failed. The status channels 60 to 67 are still working. One bit in
channel 62, DSR mode, has changed from WRITE to READ. DSR is the
Digital Store & Readout experiment. This could be significant if the
experiment is still drawing current, but the other status bit indicates
that it is switched OFF.

The on-board clock is now showing a very large error. It has lost approximately 19 days since 30 April. During the recent data collection period, the clock error has been changing at a decreasing rate. The size of the clock error and the rate at which it is changing is similar to the duration of the solar eclipse periods. This suggests that the clock might have been switching OFF during eclipses.

The eclipses have now ended, and the satellite should be in continuous sunlight for the remainder of this year, and well into next year. This should help the satellite to continue transmitting, although continuous sunlight can cause problems due to excessive temperatures.

If the watchdog timer is still operating on a 20 day cycle, ie. approximately ten days ON followed by 10 days OFF, then the VHF beacon should resume transmissions around 18 August.

The Beacon frequencies are -

VHF 145.826 MHz. AFSK FM ASCII Telemetry

UHF 435.025 MHz. OFF

S-band 2401.5 MHz. OFF

Listeners to OSCAR-11 may be interested in visiting my website which contains an archive of news & telemetry data. It also contains details about using a soundcard or hardware demodulators for data capture. There is software for capturing data, and decoding ASCII telemetry. The URL is www.users.zetnet.co.uk/clivew/

If you place this bulletin on a terrestrial packet network, please use the bulletin identifier $BID:U2RPT112.CWV, to prevent duplication.

[ANS-WSR thanks Clive, G3CWV, for the above information]

More information on UO-11 OSCAR-11 can be found at:
http://www.users.zetnet.co.uk/clivew/

MPEG3 files can be found here at Mineo, JE9PEL website:
http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm

[08212005]
NNNN
/EX

SB SAT @ AMSAT <W8ISS $ANS-275.S3
WSR 275 Part 3 10/02/2005

AMSAT NEWS SERVICE BULLETIN 275.S3 FROM AMSAT HQ
SILVER SPRING, MD, OCTOBER 02, 2005
TO ALL RADIO AMATEURS
BID: $ANS-275.S3

THE FOLLOWING ARE IN ORBIT BUT ARE
NON-OPERATIONAL AT THIS TIME:

POSAT-1 PO-28
Catalog Number: 22829
Launched : September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 435.250 MHz
435.275 MHz

Uplink: 145.925 MHz
145.975 MHz

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

PO-28 (POSAT-1), Portugal's first satellite, launched 12 years ago, will be turned over to Amateur Radio use in the very near future. That was the word July 30 from AMSAT-UK Secretary Jim Heck, G3WGM, during the AMSAT-UK International Space Colloquium in Guildford, England.

Launched September 25, 1993, the satellite operated as a packet store-and-forward BBS (9600 baud FM FSK) on Amateur Radio frequencies for several
weeks in early 1994. Over the years, PO-28's primary usage has been commer-
cial, although plans have called for eventually shifting its operation to
ham radio use. G3WGM reports that following lengthy negotiations it has been agreed that the satellite can be switched permanently to amateur frequencies. The changeover is expected to take a couple of weeks.

The Portuguese satellite was built at the University of Surrey as part of a
collaborative satellite technology program that involved industry and academe. Uplink frequencies will be 145.925 and 145.975 MHz. Downlink frequencies will be 435.250 and 435.275 MHz. More information on PO-28 is on the AMSAT Web site
http://www.amsat.org/amsat/sats/n7hpr/po28.html.

Uplink Frequencies: 145.925 and 145.975 MHz
Downlink Frequencies: 435.250 and 435.275 MHz

Orbit: 822 x 800 km, 98.6 deg inclined, sun-synchronous.

Transponder capabilities include FM repeater and 38k4 data. If you want to hear how loud this satellite is, listen on 429.950 until the change back
to amateur radio service.

Keplerian elements for PO-28 are not currently contained in the AMSAT keps bulletins, but can be found at Celestrak in amateur.txt using the name "POSAT". Users of Space Track should query the NORAD Satellite ID number 22829. The name listed by Space Track is "EYESAT A".

More information of POSAT-1 can be found at:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
http://www.amsat.org/amsat/sats/n7hpr/po28.html
[ANS-WSR wishes to thanks Trevor, M5AKA and Jim, G3WGM, for this week's information.]
[08072005]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon: 145.810 MHz (unmodulated carrier)

AO-10 has been locked into a Mode-B, 70-cm uplink and
2-meter downlink for several years.

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Non-operational

Uplink: 145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink: 435.812 MHz SSB
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Alberto E. Zagni - I2KBD reports on 02/13/05
The spacecraft is in MBL (safe mode) and is trasmitting just 6 channels of telemetry. Temperatures and voltage are nominal, but there seems to be a problem with the onboard receiver, refusing to accept commands. The spacecraft was launched in 1993, thus nearing 12 years in orbit...

Best regards
Alberto E. Zagni - I2KBD
ITAMSAT Mission Director

More information of IO-26 can be found at:

http://joshua.micronet.it/english/itamsat/itamsathome.html
http://www.amsat.org/amsat/sats/n7hpr/io26.html
www.itamsat.org

[02132005]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089

Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon: 29.408 MHz
Robot: 29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB
Beacon: 145.860 MHz
Robot: 145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB
Beacon: 29.352 MHz (intermittent)

SSB meeting frequency: 29.380 MHz (unofficial)

John, KD6PAG reports on June 16, 2004 to ANS:
RS-15 beacon seemed to be back in the mode where it's a tone about 5
seconds
off and then 5 seconds on this morning.

ANS is looking for more confirmations of RS-15 coming back.

[ANS thanks John, KD6PAG for RS-15 information]
[06202004]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplink: 145.84 145.86 145.88 145.90 MHz FM
(using 1200-baud Manchester FSK)
CW downlink: 437.125 MHz
Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)
Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM
Broadcast Callsign: HLO1-11
BBS: HLO1-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a
non-operational status.
[05092004]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM (9600-baud FSK)
Downlink: 436.500 MHz FM
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink frequency (listed on the PanSat web site) 436.500 MHz

The satellite is not available for general uplink transmissions.

The Naval Postgraduate School developed PanSat. At the time of
launch, PanSat spread-spectrum digital transponders were to
be available to Amateur Radio operators along with software to utilize
this technology.

The satellite is still operating, however, the spread spectrum packet
radio portion never took place. The spacecraft is now beyond it's
initial 2-year mission life, but telemetry records are still being
downloaded.

For more information, visit the official PanSat web site at:
http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS has no further information]
[05232004]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlink: 437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA
web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplink V-band 145.840 - 145.990 MHz CW/LSB
U-band 435.550 - 435.800 MHz CW/LSB
L1-band 1269.250 - 1269.500 MHz CW/LSB
L2-band 1268.325 - 1268.575 MHz CW/LSB
S1-band 2400.350 - 2400.600 MHz CW/LSB
Downlink: S2-band 2401.225 - 2401.475 MHz CW/USB
K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon: 2401.323, 24,048.035
[05232004]

SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational
Downlink: 437.075 MHz
Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz
Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
callsign KE6QMD, as per the user service agreement located at the
following
URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Semi-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

AO-49 (SAFIR-M) is a German amateur radio payload onboard the small
German

scientific satellite "RUBIN-2".

AO-49 was built by the German amateur radio association "AATiS
e.V." (German
acronym for "Arbeitskreis Amateurfunk und Telekommunikation in der
Schule",
which means: 'working group for amateur radio anand telecommunications
in
schools'). AO-49 is designed as a "store and broadcast" system for APRS
based messages, dedicated for the use of schools in combination with the
existing WX-Net and planned buoy experiments in Germany.

No transmissions detected since the 1st of February 2003! It appears
AO-49 is not properly aligned to illuminate the solar panels. This
should end soon. Due to its orbit, AO-49 will be in a phase without
eclipses until 13Feb03.

Martin DG8UAU has written a small software program "SAFIR-M Decoder" to
allow decoding of the received DATA0 frames. It is available at:
http://amend.gmxhome.de in the section Aktuelles.

Details on AO-49 (SAFIR-M) can be found at:
http://amend.gmxhome.de

Information about AATiS e.V. is available at:
http://www.aatis.de
[05092004]
NNNN
/EX

SB SAT @ AMSAT <W8ISS $ANS-275.S4
WSR 275 Part 4 10/02/2005

AMSAT NEWS SERVICE BULLETIN 275.S4 FROM AMSAT HQ
SILVER SPRING, MD, OCTOBER 02,2005
TO ALL RADIO AMATEURS
BID: $ANS-275.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE
PROPOSED FOR LAUNCH AT THIS TIME:

UCISAT ?O-??
Catalog number:
Proposed Launch Date: October 31, 2005

Status: Under Construction

Downlink: Submission in Progress
Uplink: Submission in Progress
Callsign: Submission in Progress

This from Matt Bennett, KF6RTB, UCISAT Communications Team Member:

Our website is www.ucisat.net .This is a new website, however, and doesn't
have the "Status" section active yet. Because of the growing interest in our
project, I'll push our webmaster to create updates (hopefully) on a week-to-
week basis. For now, the current status of the mission is as follows:

-Expected Launch Date: October 31st, 2005
-Frequency Allocation: Submission in Progress
-Construction Status: Sub-Assembly
[WSR to thank Matt Bennett, KF6RTB, for this week's report.]
[01302005]
=====
SSETI ?O-??
Catalog Number:
Proposed Launch Date: LATE 2005

Status: AWAITING LAUNCH

Graham, G3VZV reports:
Dear all,

Unfortunately we have just learnt that we have an INDEFINITE launch delay.

This is due to one of the spacecraft on the launch, "SINAH", having suffered
a significant failure and not being ready to fly.

Early indications suggest that we have a delay of at least one month, but
this is not confirmed.

The launch campaign team will make the spacecraft and the ground support
equipment safe and then come home.

This is, of course, very unfortunate, but it is not critical! The spacecraft
can easily wait for the new launch date without any significant problems,
and we will fly it as soon as we can.

In the meantime please cancel all arrangements for your national launch
events.

We'll get there eventually.

Watch this space...

Neil

SpaceDaily has a report about SSETI at:
http://www.spacedaily.com/news/internet-04zzzu.html

You can find more info about SSETI at:
http://sseti.gte.tuwien.ac.at/WSW4/

Latest news about SSETI can be found at:
http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php

Look at the website for the SSETI Express webcam
http://sseti.gte.tuwien.ac.at/WSW4/webcam.htm

[ANS thanks Graham, G3VZV for the above information]
[09252005]
=====
PHASE 3E ?O-??
Catalog Number:
Proposed Launch Date: Early 2006

Status: Under Construction

For the latest project status update please visit the AMSAT-DL
P3-E web page:
http://www.amsat-dl.org/p3e/

[ANS-WSR wishes to thank William Leijenaar, PE1RAH for this week's
report]
[10022005]
=====
CP1 ?o-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N6CP
Proposed Transmit Frequency: 436.845
[03272005]
=====
CP2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.325
[03272005]
=====
HAUSAT1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: D90HP
Proposed Transmit Frequency: 437.465
[03272005]
=====
ICE Cube 1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: W2CXM
Proposed Transmit Frequency: 437.305
[03272005]
=====
ICE Cube 2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N2VR
Proposed Transmit Frequency: 437.425
[03272005]
=====
ION ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.505
[03272005]
=====
KUTEsat ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: KC0RMW
Proposed Transmit Frequency: 437.385
[03272005]
=====
MEROPE ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: K7MSU-1
Proposed Transmit Frequency: 145.980
[03272005]
=====
nCUBE1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
2407.25
[03272005]
=====
RINCON ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
437.345
[03272005]

=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SEEDS ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: JQ1YGU
Proposed Transmit Frequency: 437.485
[03272005]
=====
Mea Huaka ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.405
[03272005]
=====
SUITSAT ?O-??
Catalog Number:
Proposed Release Date: December 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: TBA

A video of the progress of Suitsat can be found at the following URL:
http://www.amsat.org/amsat-new/information/videoNews.php

To be released from an airlock of the International Space Station some
time
in December of 2005.
[10022005]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live
radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz.
Pre-net operations start at 18:00 UTC, with current ANS bulletins trans-

mitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satelite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

387. International Space Station School Contacts on Oct 5th, 6th 7th

Newsgroup: rec.radio.amateur.space
Date: 2005-10-05 06:45:29 UTC
From: g3zhi@hotmail.com
Message-ID: <43437639.1550813@news.talktalk.net>
Source record: 1851

International Space Station School Contacts on Oct 5th, 6th 7th

Ham radio ISS school contacts
ARISS Contacts on October 5th, 6th and 7th
Listen to the contacts 'live' on Echolink join the Amsat
conference room number 101377
The International Space Station's Expedition 11 crew may be
winding down. However, their ARISS school contacts will
be very active this week with 3 scheduled sessions.

Each session will be a telebridge conducted in English.
Sessions will be held on:

5 October 16:59 UTC -- Princeton High School, Princeton,
New Jersey
6 October 15:07 UTC -- Ft Hamilton High School, Brooklyn,
NY
7 October 13:33 UTC -- Ridgefield Park High School,
Ridgefield Park, NJ

Princeton High School, Princeton, New Jersey

Station NN1SS in Greenbelt, MD will call NA1SS at
approximately 16:59 UTC.

"Princeton High School is a nationally recognized high
school listed frequently in various publications denoting
outstanding academic achievement. Princeton High School
students excel in the humanities, the fine arts, and the
sciences with students performing in Smetana Hall in
Prague and competing with the US Physics Olympic Team in
Seoul, South Korea. The student body is a diverse group
representing a wide range of interests and backgrounds
within a school community in which 17% of our students
claim one of 38 languages other than English as their
first language."

Students will ask as many of the following questions as
time allows:

1. Are the shapes of the continents as defined as they
appear on maps and globes?
2. How much less time will pass in the ISS than on Earth,
due to relativity?
3. If it weren't for family and friends, would you want to
return to Earth?
4. What are the day-to-day jobs of the space station?

5. How do you sleep?
6. What is the worst situation you've encountered in
space?
7. What luxury do you miss the most?
8. How fast did you travel to exit the earth's atmosphere?
9. How would you describe space when you look outward? If
you space walked, what went through your mind the first
time the airlock opened and you saw space?
10. What does weather look like from space? For instance,
could Hurricane Katrina be seen moving?
11. Can you really see landmarks such as the Great Wall of
China from space?
12. How often do people get space sickness in the ISS?
13. When you come back, what will you miss most?
14. How much of the day is left to yourself and for
sleeping?
15. How much bone and muscle mass will you have lost
through out your trip? How would it be if you went to Mars
for 3 months?
16. What is good or the best on the menu?
17. When were you first interested in space travel?
18. What about space intrigues you and that you do not
understand? What have you been able to learn in your
travels as of yet?
19. My brother wants to be an astronaut. What advise can
you give him?
20. How does your body feel in low gravity? Can you feel
the effect? Is it like floating?

Ft Hamilton High School, Brooklyn, NY

Station VK5ZAI in Kingston SE, South Australia will call
NA1SS at approximately 15:07 UTC.

"Fort Hamilton High School is large urban public school of
5000 students in a suburban setting of Bay Ridge,
Brooklyn. Our school reflects the ethnic diversity of New
York City. We have strong academic programs geared towards college
preparation, with
advanced placement and honors classes in all disciplines. Our
communication with will
benefit our student population, especially the astronomy classes."

Students will ask as many of the following questions as
time allows:

1. What motivated you to go into space?
2. Did your journey so far fulfill your expectations? Why
or why not?
3. How long did you have to train to prepare for your
space flight? What was the most difficult part of your
training?

4. How is the training you received actually different than traveling into space?
5. How long will you stay at ISS? What type of work will you be involved with?
6. If you could change one thing about your space mission, what would it be?
7. Besides your family and home, what do you miss the most about Earth?
8. How do you spend your free time at the ISS?
9. Do astronauts have to do daily exercises and what type?
10. How long does it take to reach the ISS? How fast is the shuttle moving after you leave the atmosphere?
11. How are basic life functions like sleeping and digestion affected by the zero-gravity environment at ISS?
12. How are medical problems such as illness or breaking a bone dealt with in space?
13. How would you fight a fire in a zero gravity environment?
14. Are there any plants or animals on the ISS being experimented on? What type of experiments?
15. Is the supply of oxygen on the ISS constantly being supplied or is there a machine that produces it?
16. How do you prepare for a space walk? and what special precautions have to be taken?
17. Does cosmic radiation affect you during your time in space?
18. Do you believe in the existence of other intelligent life forms in the universe?
19. What do you eat at the ISS? and How?
20. How many astronauts fit in the ISS?

Ridgefield Park High School, Ridgefield Park, NJ

Station ZS6BTD in Parklands, South Africa will call NA1SS at approximately 13:33 UTC.

"Ridgefield Park Junior-Senior High School is a 7-12 school of approximately 1,100 students located in Southeast of Bergen County. The school is a receiving district for 9-12 grade students from Little Ferry, a community that borders south west of Ridgefield Park, just across the Hackensack River."

"The school has a proud history that includes some rather famous graduates. Among them Ozzie Nelson of Ozzie & Harriet fame and Bud Lewis, the copilot of the Anola Gay which dropped the atomic bomb on Hiroshima, which signaled the end of World War II. It is also the proud alma mater of Greg Olsen."

Students will ask as many of the following questions as time allows:

1. I have read that you plan to use your company's miniaturized infrared imager to observe Earth's atmosphere and agricultural crops on this trip. What do you plan to do with this information and how do you foresee it will help us in the future?
2. Why are you turning the infrared camera toward space, and what do you hope to accomplish?
3. What new products do you foresee as the result of the experiments conducted on this mission?
4. Sapna and I won a national chemistry competition based on our ideas for the development of a transdermal nutrient patch. Is anything like this currently being used in the space program or do you foresee its use in the future?
5. I understand that there are three biological experiments for the European Space Agency. Could you please briefly describe them?
6. Can you explain the scientific significance of the experiment on crystal growth in space?
7. Could you explain the significance of the experiments that will test small free-flying satellites, as part of a project called SPHERES?
8. Why is space such a good place to conduct experiments in cell research?
9. Which of the jobs that you performed on board did you like the most and why?
10. Please describe any geographical or man-made features on the Earth that you can see from space.
11. Have you seen any storms like hurricanes or tornadoes from space? What do they look like?
12. What type of problems have you encountered in the space station and how have you solved them?
13. What is the role of Expedition 12?
14. Dr. Olsen, why would a very successful business man and entrepreneur like you want to travel into space?
15. How will this opportunity to experiment in space benefit others (adults, children)?
16. How different do such celestial bodies as the sun, the moon, and any of the planets look from space as compared to how they look from Earth?
17. What would have happened if anyone had gotten seriously sick during the trip?
18. Was all your training in English or did you have to learn Russian to be involved in the program?
19. Do you see yourself as being involved in the U.S.A. space program someday?
20.What are your plans when you return from this Russian mission?

As always, the ISS will be audible to anyone listening in on the 145.80 MHz downlink. Please note, since these are telebridges the ground stations will NOT be near the

school that is contacting the ISS.

Please note, the amateur equipment on the ISS will be
turned off prior to the beginning of the contact. It will
be returned to service as quickly as possible.

Upcoming ARISS events can be found at
http://www.amsat.org/amsat/ariss/news/arissnews.txt
The next scheduled event is with students at Princeton High
School, Princeton, New Jersey on Wednesday, 5 October 2005 at 16:58
UTC.

ARISS is an international educational outreach program partnering the
participating
space agencies, NASA, Russian Space Agency, ESA, CNES, JAXA, and CSA,
with the AMSAT and
IARU organizations from participating countries.
ARISS offers an opportunity for students to experience the excitement
of Amateur Radio
by talking directly with crewmembers on-board the International Space
Station.

Teachers, parents and communities see, first hand, how Amateur Radio
and crewmembers on
ISS can energize youngsters' interest in science, technology, and
learning.

Further information on the ARISS programme is available on the website

http://www.rac.ca/ariss (graciously hosted by the Radio Amateurs of
Canada). Information
about the next
scheduled ARISS contact can be found at
http://www.rac.ca/ariss/upcoming.htm#NextContact.

73 Ian G3ZHI

http://www.qsl.net/g3zhi - many ham radio links

http://www.ukirlp.co.uk

G4NJI IRLP 5200 Echolink 135909
Rotherham simplex 145.2875mhz

Skype g3zhiian
VoiP 642109

Mobile 0783 338 0578

388. Radio Meteor Obs. Bull. September 2005

Newsgroup: rec.radio.amateur.space
Date: 2005-10-09 11:35:23 UTC
From: Chris Steyaert <observations@rmob.org>
Message-ID: <q20ik1lg34ubsooag88pd51o52l0juukn9@4ax.com>
Source record: 1852
Cross-posted to: rec.radio.amateur.space,sci.astro.amateur

Radio Meteor Observation Bulletin No. 146 of September 2005 (63 K) is available now as

http://visualrmob.free.fr/rmobtext/rmob0509.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

http://radio.data.free.fr

Chris

389. ANS-282 AMSAT Weekly News Service Bulletin

Newsgroup: rec.radio.amateur.space
Date: 2005-10-10 13:40:28 UTC
From: JoAnne Maenpaa <wb9jej_no-spam@earthlink.net>
Message-ID: <gbu2f.12495$QE1.11366@newsread2.news.atl.earthlink.net>
Source record: 1853

AMSAT NEWS SERVICE
ANS-282

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:

* Initial Report From the AMSAT Meeting
* AMSAT President's Letter
* ARISS Status October 3, 2005
* New Launch Date for SSETI Express
* AO-51 Special Event - JOTA Weekend 15-16 October
* South Africa, Other African Nations to Build LEO Satellite Network

SB SAT @ AMSAT $ANS-282.01
Initial Report From the AMSAT Meeting

AMSAT News Service Bulletin 282.01
>From AMSAT HQ SILVER SPRING, MD.
October 9, 2005
To All RADIO AMATEURS
BID: $ANS-282.01

The AMSAT News Service caught up with Board Member Emily Clarke, W0EEC after the first day of the Annual AMSAT BoD meeting in Pittsburgh. Emily said, "This
is my first meeting as a member of the board, and I am very impressed at how unified the board is. The meeting has been focused on our top priority - to build and launch Eagle(s) - and the board has been very productive in identifying plan elements that will bring Eagle to orbit."

Emily continued with, "One challenge we face is fund-raising, which is difficult to do at an early stage of the project. Unlike previous efforts much
of the work, such as writing and testing software for the SDTX is intangible.
Fundraising is our biggest challenge, and I encourage every member to think of
creative ways we might meet our goal."

Emily described another key action of the Board being the elections of the Executive Team officers taking place this week. The Board will announce the results of these elections when the process is completed.

The AMSAT Annual Meeting followed on Friday, October 8, at 8PM.

Powerpoint slides from this meeting can be viewed on-line at:
http://www.amsat.org/amsat-new/articles/2005_General_Meeting/

If one is navigating from the http://www.amsat.org front page the steps are:
Navigator (main menu)
Current Articles
2005 General Meeting

We will upload additional presentations as they are reviewed and approved.

[ANS thanks Emily, W0EEC for the above information]

/EX

SB SAT @ AMSAT $ANS-282.02
AMSAT President's Letter

AMSAT News Service Bulletin 282.02
>From AMSAT HQ SILVER SPRING, MD.
October 9, 2005
To All RADIO AMATEURS
BID: $ANS-282.02

As I prepare for the series of AMSAT meetings that will take place in Pittsburgh this week I have been reviewing the accomplishments of the past year and the challenges of the coming year. I am pleased with the progress of
AMSAT's organizational and infrastructure improvements and with the progress of the two satellite projects, P3E and Eagle. For the coming year I am committed to focus AMSAT's activities primarily on the completion and launch of P3E, the construction of the Eagle space frame and implementation of the Eagle Software Defined Transponders (SDX), at a minimum.

The changes in AMSAT's organizational structure have created many new opportunities for members to actively contribute to the growth and advancement
of our organization. Our members are working on teams that are dedicated to areas of excellence such as finance and fundraising, marketing and field operations, technical and scientific, office management, external affairs, operations, human spaceflight, and record keeping. We have a great group of volunteers working in these areas and there is always room for more people.

Our infrastructure has improved in a number of ways, most notably the rollout
and constant upgrade of AMSAT's new Web site and on-line store and the overhaul of our accounting practices. Other improvements are in process and will be brought on line as time permits such as the AMSAT Information Management System (AIMS) and member only services.

The P3E project is a very exciting one that holds great promise for the return
of AMSAT to the benefits of high earth orbit satellites. This project is being led by AMSAT-DL, as have all the HEO satellite projects. AMSAT in North
America is contributing substantial manpower and funding to P3E and is committed to the success of the project and to our close relationship with our
good friends and colleagues in AMSAT-DL. I am personally a member of AMSAT, AMSAT-DL and AMSAT-UK.

The Eagle project is maturing to the point that we will soon be ready to build
the space frame and start assembling some of the payload modules like the Internal Housekeeping Unit and the U/V and L/S software defined transponders.
Nearly all of the work that we are doing in support of P3E will also be used in Eagle so we will maximize the benefits of having cooperated on P3E. As with any new satellite design there are design issues and uncertainties. Let
there be no mistake that these are normal and health parts of the design process as we balance the science, engineering, technology and mission requirements for Eagle. The Eagle team is large, diverse and excited about what they are doing. New qualified volunteers are being added to the team on
a regular basis. Status reports are appearing in every issue of the AMSAT Journal.

This coming year will be one of improved communication. There will be an effort to expand our communications beyond the official outlets, the Journal and AMSAT News Service. You will see more reports on the AMSAT-BB message board and we will improve the content and timeliness of the information on the
AMSAT Web site, especially on the Eagle pages.

The annual membership meeting will be held Friday evening, October 7th, at 8:00 pm Eastern Time and is open to the membership. This meeting will be recorded and both audio and video will be placed on AMSAT servers soon after the meeting. The meeting will also be broadcast on the AMSAT EchoLink conference. If you have questions and cannot be there please submit them by e-mail (details to be announced on ANS). We may also be able to take questions
from EchoLink's text messaging window, if we can get someone in the meeting to
operate the computer.

AMSAT is an exciting and vibrant organization with a great deal to offer our members. No organization is perfect but we have a fabulous Mission and Vision
and we are performing to those promises. I encourage those who need more information or clarification to gain a better understanding of what we are doing and why it is important and exciting to contact me or any of the other

Board members and Officers. Contact information is on the AMSAT Web site at
http://www.amsat.org/amsat-new/AboutAmsat/officers.php.

Rick, W2GPS
AMSAT President

[ANS thanks Rick, W2GPS for the above information]

/EX

SB SAT @ AMSAT $ANS-282.03
ARISS Status October 3, 2005

AMSAT News Service Bulletin 282.03
>From AMSAT HQ SILVER SPRING, MD.
October 9, 2005
To All RADIO AMATEURS
BID: $ANS-282.03

1. Tregaron School Contact Successful

On September 29, Tregaron High School (Ysgol Uwchradd Tregaron) in Tregaron,
Ceredigion, Wales, U. K., experienced a successful ARISS contact. John
Phillips, KE5DRY, answered 18 questions posed to him by the 14 students and
after the contact was lost, he gave answers to the two remaining questions
the
students had prepared, allowing other radio stations to hear the answers.
Approximately 400 students, teachers and dignitaries witnessed the contact.

Audio of the contact is available on the ARISS-Europe website. See:
http://www.ariss-eu.org/2005_09_29.htm

To view the BBC article online, see:
http://news.bbc.co.uk/1/hi/wales/4292620.stm

2. ARRL Article on Expedition 12

On September 28, ARRL ran a web story on the new ISS crew. "ISS Expedition
12
crew, space tourist to launch October 1" may be found at:
http://www.arrl.org/

3. Space Adventures Announces Greg Olsen's Flight Plans

A press release on Greg Olsen's flight and planned amateur radio contacts
has
been posted on the Space Adventures website. See:
http://www.spaceadventures.com/media/releases/2005-09/283

4. Cosmonaut Greets IARU Conference Members

On September 11-15, the International Amateur Radio Union (IARU) Region 1
held
their tri-annual General Conference in Davos, Switzerland, where one hundred
fifty delegates from 56 countries participated. On Sunday, September 11,

during the opening ceremony, the delegates viewed a video of Sergei Krikalev,
U5MIR, who sent greetings from space to the participants, wishing them a successful meeting. A news bulletin covering the meeting and including a link
to the video has been posted on the ARISS-Europe website. See:
http://www.ariss-eu.org/2005_09_30.htm

5. Students Run PCSAT2 Experiment

On Thursday, September 29, Naval Academy midshipmen ran an experiment with PCSAT2. The students watched for packets via the PCSAT2 145.825 uplink, which
were digipeated on the 435.275 downlink, and answered those by voice on the 437.975 downlink. Although they had little time to prepare for the pass, the students did have some success, and gained some experience from their lesson.

6. ARISS Budget 2006

A proposal was submitted to the Space Operations Mission Directorate (SOMD) to
request funds for the ARISS program for the fiscal year 2006. ARISS Chairman
Frank Bauer gave a presentation supporting this request on Friday, September 30.

7. NASA Nights Event

On September 27, NES teachers from Pine Ridge Middle School in Naples, Florida, held "NASA Nights," an event to educate parents, teachers and students about NASA programs. Amateur Radio operators from the Amateur Radio Association of South West Florida volunteered to set up a radio demonstration
station, and schedule radio contacts with Amateur Radio operators who work at
NASA facilities. The scheduled radio contacts allowed students to ask questions of "NASA experts." After listening to contacts with hams in Chile,
Great Britain and several states, students asked questions of hams at the NASA
Ames Center in California. The Ames hams then made contact with hams at Kennedy Space Center, and relayed students' questions to KSC experts about the
ISS and shuttles.

8. ARISS International Meeting Held

The monthly ARISS International teleconference was held on Tuesday, September
27. Agenda items discussed included the status of the Columbus Module antennas, SSTV, the SuitSat project, Greg Olsen's contacts, and the use of Voice over Internet Protocol (VoIP) for direct ARISS contacts. The next

international meeting will be held on October 25.

[ANS thanks Carol, KB3LKI for the above information]

/EX

SB SAT @ AMSAT $ANS-282.04
New Launch Date for SSETI Express

AMSAT News Service Bulletin 282.04
>From AMSAT HQ SILVER SPRING, MD.
October 9, 2005
To All RADIO AMATEURS
BID: $ANS-282.04

We have been advised that a new launch date has been agreed - Thursday 27th October from the Plesetsk Cosmodrome - with 28th October as a back-up date. The launch time is still expected to remain at 06:52:26 UTC

For those who have already set-up their sat TV equipment to receive the ESA transmissions on ASTRA 1G - you may like to know that the launch of the ESA Cryosat spacecraft will be broadcast this coming Saturday - 8th October. Cryosat will lift-off from a launch facility at Plesetsk just a few kilometers
away from where SSETI Express will be launched from.

Start End Description
GMT GMT
14:20 14:45 Start of ESA TV Program - welcome from ESA/ESRIN
14:45 15:15 Launch coverage from ESA/ESOC and Plesetsk Cosmodrome
15:02 Scheduled lift-off
15:15 16:30 Cryosat background information - live from ESA/ESRIN
16:30 16:45 Live coverage of satellite/launcher separation from ESA/ESOC
16:36 Scheduled orbital injection
17:00 17:30 Post-launch media briefing from ESA/ESRIN

[ANS thanks Graham, G3VZV for the above information]

/EX

SB SAT @ AMSAT $ANS-282.05
AO-51 Special Event - JOTA Weekend 15-16 October

AMSAT News Service Bulletin 282.05
>From AMSAT HQ SILVER SPRING, MD.
October 9, 2005
To All RADIO AMATEURS
BID: $ANS-282.05

The annual Boy and Girl Scouts "Jamboree on the Air" Amateur Radio event is scheduled for 15 and 16 October 2005. As this is an International Scouting event, amateur radio stations around the world are invited to participate. The
AO-51 command team is scheduling the satellite for exclusive use by the

Scouts, and Satellite operators communicating with the Scouts, for this weekend. Please allow the Scouts the opportunity to make as many contacts as possible via AO-51 during this short time period. Base stations, please remember that most of the JOTA stations will be portable, so please use minimum power. The official times for the JOTA event will be from 1200 UTC on
October 15 until 1200 UTC on October 17, 2005.

For the JOTA weekend, AO-51 will be configured in the Dual FM repeater mode. This will provide two independent FM repeaters (separate uplink and downlink frequencies) for use over the weekend. Both repeaters will be for use by the JOTA activity. This mode will run Monday through Friday before the event to allow amateur satellite stations to familiarize and test this mode. The configuration of the satellite frequencies for this mode is listed below.

AO-51 FM repeater #1
Downlink: 435.300 MHz
Uplink: 145.920 MHz with 67hz PL Tone

AO-51 FM repeater #2
Downlink: 435.150 MHz
Uplink: 145.880 MHz with NO PL Tone

Here are some web links for information on the JOTA weekend activity.
http://www.arrl.org/FandES/ead/jota.html
http://www.arrl.org/FandES/ead/ideas.html
http://www.scouting.org/international/jota.html

If your local club has a JOTA activity planned for the weekend please consider
volunteering your services to provide a satellite communication station for the event.

Thanks for your support and participation.

[ANS thanks Mike, KE4AZN for the above information]

/EX

SB SAT @ AMSAT $ANS-282.06
South Africa, Other African Nations to Build LEO Satellite Network

AMSAT News Service Bulletin 282.06
>From AMSAT HQ SILVER SPRING, MD.
October 9, 2005
To All RADIO AMATEURS
BID: $ANS-282.06

SA AMSAT has been involved in discussions with the Department of Science and Technology to include an amateur payload to serve the needs of Amateurs on the
African continent.

"Now that the announcement has been made we will intensify our discussions with the various role-players", SA AMSAT President, Hans van de Groenendaal ZS6AKV said.

"At this time I call on Radio Amateurs to send in ideas of what payload they believe will serve the African Amateur Radio Community best.

The full story can be seen at:

http://www.southgatearc.org/news/october2005/sa_satellite.htm

[ANS thanks Trevor, M5AKA for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's
Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are
available from the AMSAT Office.

73,
This week's ANS Editor,
Al Marote, WA1LBG
wa1lbg at amsat dot org

390. ANS-282.07 Late Breaking News from AMSAT Board of Directors Meeting

Newsgroup: rec.radio.amateur.space
Date: 2005-10-10 13:41:41 UTC
From: JoAnne Maenpaa <wb9jej_no-spam@earthlink.net>
Message-ID: <pcu2f.12496$QE1.8506@newsread2.news.atl.earthlink.net>
Source record: 1854

SB SAT @ AMSAT $ANS-282.07
AMSAT Board and Officers for 2005-2006

AMSAT News Service Bulletin 282.07
From AMSAT HQ SILVER SPRING, MD.
October 9, 2005
To All RADIO AMATEURS
BID: $ANS-282.07

One of the key actions of the Board of Directors was the election of the
Executive Team officers.

Here are the results:

AMSAT Board of Directors

Richard Hambly, W2GPS
Barry Baines, WD4ASW
Gunther Meisse, W8GSM
Dr. Thomas A. Clark, W3IWI
Lou McFadin, W5DID
Paul Shuch, N6TX
Emily Clarke, W0EEC
Bob McGwier, N4HY (First Alternate)
Lee McLamb, KU4OS (Second Alternate)

AMSAT Officers

Richard Hambly, W2GPS: President
Lee McLamb, KU4OS: Executive Vice President
Mike Kingery, KE4AZN: Vice-President Operations
Frank Bauer, KA3HDO: Vice President of Human Spaceflight
Bob McGwier, N4HY: Vice-President Engineering
Barry Baines, WD4ASW: Vice-President Marketing and User Services
Steve Diggs, W4EPI: Secretary
Gunther Meisse, W8GSM: Treasurer
Martha Saragovitz: Manager

Stan Wood, WA4NFY has retired as VP of Engineering. AMSAT thanks Stan for
his years of service in this important capacity.
We welcome and congratulate, Bob McGwier, N4HY, as the new AMSAT
Vice-President Engineering.

/EX

391. WSR-282 AMSAT Weekly Satellite Report

Newsgroup: rec.radio.amateur.space
Date: 2005-10-10 13:42:43 UTC
From: JoAnne Maenpaa <wb9jej_no-spam@earthlink.net>
Message-ID: <ndu2f.12497$QE1.5829@newsread2.news.atl.earthlink.net>
Source record: 1855

```
This report is organized into 4 parts.
Part 1 - operational analog amateur satellites.
Part 2 - operational digital amateur satellites.
Part 3 - non - operational satellites
Part 4 - proposed satellites

SB SAT @ AMSAT <KB9MMC $ANS-282.S1
WSR 282 Part 1 10/09/2005

AMSAT NEWS SERVICE BULLETIN 282.S1 FROM AMSAT HQ
SILVER SPRING, MD, OCTOBER 09, 2005
TO ALL RADIO AMATEURS
BID: $ANS-282.S1

VO-52 HAMSAT
Catalog Number: 28650
Launch Date: May 05,2005

Status: Testing
Current Mode: U/V

Proposed frequencies:
-------------------
Indian transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacom : 145.940MHz continue carier signal

Dutch transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacon : 145.860MHz 12WPM with CW message
[07242005]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - ON
FM REPEATER - V/U

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
Analog voice uplink: 145.880 MHZ FM
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone
```

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

Current scheduled operating modes:

AO-51 Special Event - JOTA Weekend 15-16 Oct

The annual Boy and Girl Scouts "Jamboree on the Air" Amateur Radio event is scheduled for 15 and 16 October 2005. As this is an International Scouting event, amateur radio stations around the world are invited to participate. The AO-51 command team is scheduling the satellite for exclusive use by the Scouts, and Satellite operators communicating with the Scouts, for this weekend. Please allow the Scouts the opportunity to make as many contacts as possible via AO-51 during this short time period. Base stations, please remember that most of the JOTA stations will be portable, so please use minimum power. The official times for the JOTA event will be from 1200 UTC on October 15 until 1200 UTC on October 17, 2005.

For the JOTA weekend, AO-51 will be configured in the Dual FM repeater mode. This will provide two independent FM repeaters (separate uplink and downlink frequencies) for use over the weekend. Both repeaters will be for use by the JOTA activity. This mode will run Monday through Friday before the event to allow amateur satellite stations to familiarize and test this mode. The configuration of the satellite frequencies for this mode is listed below.

AO-51 FM repeater #1
Downlink: 435.300 MHz
Uplink: 145.920 MHz with 67hz PL Tone

AO-51 FM repeater #2
Downlink: 435.150 MHz
Uplink: 145.880 MHz with NO PL Tone

Here are some web links for information on the JOTA weekend activity.
http://www.arrl.org/FandES/ead/jota.html
http://www.arrl.org/FandES/ead/ideas.html
http://www.scouting.org/international/jota.html

If your local club has a JOTA activity planned for the weekend please consider volunteering your services to provide a satellite communication station for the event.

Thanks for your support and participation.

[ANS-WSR thanks Mike Kingery, KE4AZN for the above information]
[09252005]
=====
SO-50 SAUDISAT-1C

Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz (67.0 Hz PL tone) (See below for operating
procedures)
Downlink: 436.795 MHz

There have been unconfirmed reports on the amsat-bb remailer that SO-50
has shifted downlink frequency as much as 5khz up. This both from Europe.

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary)

1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm
the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT
the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window
will reset the 10 minute timer.
[09122004]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplink: 145.850 145.870 145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

John, N4QWL reports on July 16th, 2005:

Last evening I had a AOS to LOS qso with WI2W. FO-29 came up at 01:17z
here in FM07 and I found WI2W and we chatted until 01:33z. The satellite was
at 2 degrees elevation when I finally heard him start to crackle a bit. What
a great QSO! To think that I watched this bird launch back in 1996 and it
is still working so well is a real thrill. I believe I still have the
video. I might just look for it and watch it again. Boy do I love this
satellite stuff! Look for you all up there.

Please send the reception reports to lab2 'at' jarl.or.jp.
Please use the subject line: 'FO-29 reception report'.

Mineo, JE9PEL, has an FO-29 satellite telemetry analysis program that
will automatically analyze all digital telemetry from the satellite (such as
current, voltage and temperature). FO29CWTE is available at:
http://www.ne.jp/asahi/hamradio/je9pel/
[ANS-WSR wishes to thanks John, N4QWL for this week's report]
[07172005]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

The latest information on AO-27 from control operator Michael Wyrick,
N3UC (former N4USI), can be found at:
http://www.ao27.org

An AO-27 question-and-answer page is available on the AMSAT-NA web
site, with updates by Ray, W2RS. The URL is:
http://www.amsat.org/amsat/intro/ao27faq.html

[ANS-WSR thanks John, K6YK, for this week's AO-27 report]
[08292004]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Semi-operational in sunlight.
Return to active status: June 21,2002

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A
145.975 to 145.925 MHz CW/USB Mode B
Beacon: 29.502 MHz, 145.972 MHz, 435.1 MHz, 2304.1 MHz

Emily, W0EEC has created a website to allow the users of AO-7 to record
contacts, observations and use of the satellite more effectively at:
http://www.emilyshouse.com/experthams/ao7/main.php
This includes the ability to log contacts.

Tim, K3TZ has written a program to decode AO-07 telemetry.
The program can be downloaded at:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

For more AO-7 info:
http://www.amsat.org/amsat/sats/n7hpr/ao7.html
[11142004]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS

Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: U/V CROSS-BAND REPEATER
Digipeater: Inactive

The current Expedition 11 crew is:
Commander Sergei Krikalev
Flight Engineer John Phillips

Worldwide packet uplink: 145.990 MHz FM
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM
Doppler Shift is 10 KHz

Russian callsigns: RS0ISS, RZ3DZR
USA callsign: NA1SS
Packet station mailbox callsign: RS0ISS-11
Packet station keyboard callsign: RS0ISS-3
Digipeater callsign: ARISS

This from Frank Bauer, KA3HDO:
The SSTV system will be installed inside the Service module as an integral part of the ARISS ham radio system. It will transmit and receive (JPG)still images from the International Space Station in a format called Slow Scan TV (SSTV). When fully operational, the SSTV system is capable of sending up to 480 images per day from ISS. It will also be able to receive images from amateur radio stations on Earth. This system will utilize the already installed Kenwood D-700 radio and the ARISS antennas mounted on the Service Module. The SSTV equipment flown on Progress
19P includes the SpaceCam software, a radio/computer interface module, and data cables. The dedicated laptop for SSTV operations will be launched on a subsequent Progress vehicle

This off the ARISS webpage:
< http://www.rac.ca/ariss/oindex.htm#New%20ARISS%20Operations >:
The ARISS program is pleased to announce that the amateur radio equipment aboard the International Space Station is now operating in cross-band repeat mode. We realize that many of you will miss the packet-operating mode. However, cross-band repeat allows further experimentation of the ISS amateur radio system

The downlink for this operating mode remains the same, so listen for the station on 145.80 MHz. The new uplink frequency is 437.80 MHz. All freq-uencies are subject to Doppler shifting. For further information on working satellites and adjusting for Doppler shift, please review Emily Clark's

(W0EEC) excellent presentation on AMSAT's website:
http://www.amsat.org/amsat-new/information/faqs/Intro_sats.pdf

The ISS daily crew schedule can be found at:
http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.

More information is available at:
http://www.rac.ca/ariss
http://spaceflight.nasa.gov/station/reference/radio/
http://www.marexmg.org/fileshtml/unprotopage.html
http://www.issfanclub.com
http://oscar.dcarr.org/
[09182005]
NNNN
/EX

SB SAT @ AMSAT <KB9MMC $ANS-282.S2
WSR 282 Part 2 10/09/2005

AMSAT NEWS SERVICE BULLETIN 282.S2 FROM AMSAT HQ
SILVER SPRING, MD, OCTOBER 09, 2005
TO ALL RADIO AMATEURS
BID: $ANS-282.S2

PCSAT2 ?0-??
Catalog Number:
Launch Date: August 1, 2005

Status: Operational

PCSAT2 was installed on the exterior of the International Space
Station and was activated on August 3, 2005.

PCSAT2 CAPABILITIES: PCSAT2 is attached to the ISS and so its operations
must be in cooperation with the ARISS communications suite to minimize
any
mutual interference and to coordinate activities. Here are the
capabilities
of the PCSAT2 and ARISS payloads:

PCSAT SYSTEM A:

435.275 PCSAT2 DOWNLINK 1200 baud packet with uplink on 145.825
435.275 PCSAT2 DOWNLINK Occasional user PSK-31 continuous downlink
145.825 PCSAT2 DOWNLINK 1200 baud packet
PCSAT SYSTEM B:

437.975 PCSAT2 DOWNLINK periodic Solar Cell data and PCSAT2 telemetry at
9600 baud
437.975 PCSAT2 DOWNLINK TNC-B command downlink at 1200 baud
437.975 PCSAT2 DOWNLINK User Voice Repeater with VHF uplink

437.975 PCSAT2 DOWNLINK Packet digipeater with VHF uplink

It looks like PCSAT2 can best contribute at this time by operating in PSK-31 mode for the near future. This is a very exciting new transponder
mode which solves the congestion problem on FM repeaters by letting multiple stations all communicate at the same time.

PSK-31 users are welcome to try out the new PCSAT2 PSK-31 transponder on ISS with an uplink on 29.402 +/- 1 KHz and downlink on 435.275 +/- Doppler using FM.

The FM downlink lets everyone operate full duplex and everyone to see the same view of the passband as everyone else. THus you can see exactly
what your signal looks like to everyone else.

Help Wanted:

Here is your chance to become a viable part of the Amateur Satellite Community.

We are looking for a volunteer satellite packet station in Hawaii that is interested in helping with telemetry and sat-gating of PCSAT2 and ARISS packets. Requirements are:

1) General familiarity with packet
2) TNC connected to a cross band radio that can RX on UHF and TX on VHF.
3) modest UHF beam and rotator system.

Contact WB4APR for more information.

Packets seen from PCSAT2 can be reviewed at:
http://www.findu.com/cgi-bin/pcsat2.cgi

A screen shot of both the 9600 bps and 1200 bps decoded data as seen by Simon, 9W2QC, can be seen at:
http://www.9w2qc.net/pcsat2/

More information on PCSAT2 can be found at:
http://web.usna.navy.mil/~bruninga/pcsat2.html

[ANS-WSR thanks Bob, WB4APR and the U.S. Naval Academy Satellite Lab for the aboveinformation.]

[08282005}
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - ON
FM REPEATER - V/U HIGH POWER

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
Analog voice uplink: 145.880 MHz FM
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

Current scheduled operating modes:

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http://www.scouting.org/international/jota.html

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Thanks for your support and participation.

[ANS-WSR thanks Mike Kingery, KE4AZN for the above information]
[09252005]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Non-Operational?????

Uplink/downlink: 145.827 MHz 1200 baud AX.25 AFSK via W3ADO-1
Aux/Uplink: 435.250 MHz 9600 baud via PCSAT-2 (off)
APRS Downlink: 144.390 MHz (Region 2)

PCSat is a 1200-baud APRS digipeater designed for use by stations using hand-held or mobile transceivers. Downlinks feed a central web site at: http://pcsat.aprs.org

The APRS-equipped PCSat was built by midshipmen from the U.S. Naval Academy under the guidance of Bob Bruninga, WB4APR.
[07242005]
=====
CUTE-1
Catalog number: 27844
Launched: June 30,2003

Status: Operational

Uplink: ?
Downlink: 436.8375 CW
437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)
Cliff, K7RR reports:
In the latest Weekly Satellite Report, CUTE 1, #27844 is listed as OPERATIONAL?
Indeed it is very operational as a CUBESAT sending CW telemetry on 436.8345 MHz. At the July 7 2005, 23:45:20 pass over the Western USA:
CUTE 1 6B A4 xx 7F D7 66A8 4702 FF FF7C 65
CUTE 1 6C A6 59 80 D9 66A8 4702 FF FE7C B6

The June 30th KEPS were within ten seconds of AOS and LOS. It is an very good object to practice tracking as the orbit and transmitter power are similar to proposed CUBESATS awaiting launch this December. As a check for Doppler correction, the lack of change in tone is an excellent indicator.

CUTE 1 is a Japanese (Tokyo Institute of Technology) one kilogram nanosatellite that was launched by a Rokot rocket from Plesetsk at 14:15 UT on 30 June 2003. It carries a 100 mW beacon at 436.8375 MHz. Initial orbital parameters were period 101.4 min, apogee 831 km, perigee

819 km, and inclination 98.7?.

For further info about CUTE-1 goto:
http://lss.mes.titech.ac.jp/ssp/cubesat/operation/Schedule_e.html

[ANS WSR wishes to thank Cliff, K7RR, for this week's information]
[07242005]
=====
GO-32 TECHSAT-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
(435.325 n/a - temperature problems)
Uplinks: 145.850, 145.890, 145.930 FM
1269.700, 1269.800, 1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[03132005]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink: 145.850 or 145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz
Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[05152005]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for
APRS users.

Uplink: 145.90 145.92 145.94 145.96 MHz FM
(using 1200-baud Manchester FSK)

Downlink: 437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon: 2401.1428 MHz
Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

A WOD collection of current graphics along with general information
and telemetry samples can be found at:
http://www.telecable.es/personales/ea1bcu
[05092004]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational?

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK).
approx. 10 days ON, 10 days OFF
Mode-S Beacon: 2401.500 MHz. ... OFF
UHFBeacon: 435.025 MHz. ... OFF

OSCAR-11 is back! I received the good news, on Saturday morning, while
at the AMSAT-UK Colloquium. This was entirely unexpected! On Sunday
morning Bob G4VRC played me a recording of an early morning pass
received that day.

During the period 21 July to 14 August 2005 consistent signals have been
heard from 30 July to 08 August. Signals seem to be weaker than usual,
confirmed by the many reports received. However,since I last heard the
satellite on 30 April, I've reinstalled my antennas , which makes
comparisons difficult.

Many thanks for all the recent reports of OSCAR-11 including those from
KU7Z (who heard it first), KB2M, VK6XH, HK7MKE, KA2UPW, JE9PEL, G1OCN,
HB9SKA and G8OQW.

All the analogue telemetry channels, 0 to 59 are zero, ie they have
failed. The status channels 60 to 67 are still working. One bit in
channel 62, DSR mode, has changed from WRITE to READ. DSR is the
Digital Store & Readout experiment. This could be significant if the
experiment is still drawing current, but the other status bit indicates
that it is switched OFF.

The on-board clock is now showing a very large error. It has lost
approximately 19 days since 30 April. During the recent data collection
period, the clock error has been changing at a decreasing rate. The
size of the clock error and the rate at which it is changing is similar
to the duration of the solar eclipse periods. This suggests that the
clock might have been switching OFF during eclipses.

The eclipses have now ended, and the satellite should be in continuous
sunlight for the remainder of this year, and well into next year. This
should help the satellite to continue transmitting, although continuous

sunlight can cause problems due to excessive temperatures.

If the watchdog timer is still operating on a 20 day cycle, ie.
approximately ten days ON followed by 10 days OFF, then the VHF beacon
should resume transmissions around 18 August.

The Beacon frequencies are -

VHF 145.826 MHz. AFSK FM ASCII Telemetry

UHF 435.025 MHz. OFF

S-band 2401.5 MHz. OFF

Listeners to OSCAR-11 may be interested in visiting my website which
contains an archive of news & telemetry data. It also contains details
about using a soundcard or hardware demodulators for data capture.
There is software for capturing data, and decoding ASCII telemetry. The
URL is www.users.zetnet.co.uk/clivew/

If you place this bulletin on a terrestrial packet network, please use
the bulletin identifier $BID:U2RPT112.CWV, to prevent duplication.

[ANS-WSR thanks Clive, G3CWV, for the above information]

More information on UO-11 OSCAR-11 can be found at:
http://www.users.zetnet.co.uk/clivew/

MPEG3 files can be found here at Mineo, JE9PEL website:
http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm

[08212005]
NNNN
/EX

SB SAT @ AMSAT <KB9MMC $ANS-282.S3
WSR 282 Part 3 10/09/2005

AMSAT NEWS SERVICE BULLETIN 282.S3 FROM AMSAT HQ
SILVER SPRING, MD, OCTOBER 09, 2005
TO ALL RADIO AMATEURS
BID: $ANS-282.S3

THE FOLLOWING ARE IN ORBIT BUT ARE
NON-OPERATIONAL AT THIS TIME:

POSAT-1 PO-28
Catalog Number: 22829
Launched : September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 435.250 MHz
435.275 MHz

Uplink: 145.925 MHz
145.975 MHz

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

PO-28 (POSAT-1), Portugal's first satellite, launched 12 years ago, will be turned over to Amateur Radio use in the very near future. That was the word July 30 from AMSAT-UK Secretary Jim Heck, G3WGM, during the AMSAT-UK International Space Colloquium in Guildford, England.

Launched September 25, 1993, the satellite operated as a packet store-and-forward BBS (9600 baud FM FSK) on Amateur Radio frequencies for several weeks in early 1994. Over the years, PO-28's primary usage has been commercial, although plans have called for eventually shifting its operation to ham radio use. G3WGM reports that following lengthy negotiations it has been agreed that the satellite can be switched permanently to amateur frequencies. The changeover is expected to take a couple of weeks.

The Portuguese satellite was built at the University of Surrey as part of a collaborative satellite technology program that involved industry and academe. Uplink frequencies will be 145.925 and 145.975 MHz. Downlink frequencies will be 435.250 and 435.275 MHz. More information on PO-28 is on the AMSAT Web site http://www.amsat.org/amsat/sats/n7hpr/po28.html.

Uplink Frequencies: 145.925 and 145.975 MHz
Downlink Frequencies: 435.250 and 435.275 MHz

Orbit: 822 x 800 km, 98.6 deg inclined, sun-synchronous.

Transponder capabilities include FM repeater and 38k4 data. If you want to hear how loud this satellite is, listen on 429.950 until the change back to amateur radio service.

Keplerian elements for PO-28 are not currently contained in the AMSAT keps bulletins, but can be found at Celestrak in amateur.txt using the name "POSAT". Users of Space Track should query the NORAD Satellite ID number 22829. The name listed by Space Track is "EYESAT A".

More information of POSAT-1 can be found at:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
http://www.amsat.org/amsat/sats/n7hpr/po28.html
[ANS-WSR wishes to thanks Trevor, M5AKA and Jim, G3WGM, for this week's information.]
[08072005]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon: 145.810 MHz (unmodulated carrier)

AO-10 has been locked into a Mode-B, 70-cm uplink and
2-meter downlink for several years.

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Non-operational

Uplink: 145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink: 435.812 MHz SSB
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Alberto E. Zagni - I2KBD reports on 02/13/05
The spacecraft is in MBL (safe mode) and is trasmitting just 6 channels
of telemetry. Temperatures and voltage are nominal, but there seems to
be a problem with the onboard receiver, refusing to accept commands.
The spacecraft was launched in 1993, thus nearing 12 years in orbit...

Best regards
Alberto E. Zagni - I2KBD
ITAMSAT Mission Director

More information of IO-26 can be found at:

http://joshua.micronet.it/english/itamsat/itamsathome.html
http://www.amsat.org/amsat/sats/n7hpr/io26.html
www.itamsat.org

[02132005]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon: 29.408 MHz
Robot: 29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB
Beacon: 145.860 MHz
Robot: 145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB
Beacon: 29.352 MHz (intermittent)
SSB meeting frequency: 29.380 MHz (unofficial)

John, KD6PAG reports on June 16, 2004 to ANS:
RS-15 beacon seemed to be back in the mode where it's a tone about 5
seconds
off and then 5 seconds on this morning.

ANS is looking for more confirmations of RS-15 coming back.

[ANS thanks John, KD6PAG for RS-15 information]
[06202004]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplink: 145.84 145.86 145.88 145.90 MHz FM
(using 1200-baud Manchester FSK)
CW downlink: 437.125 MHz
Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)
Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM
Broadcast Callsign: HLO1-11
BBS: HLO1-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a
non-operational status.
[05092004]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM (9600-baud FSK)
Downlink: 436.500 MHz FM
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====

PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink frequency (listed on the PanSat web site) 436.500 MHz

The satellite is not available for general uplink transmissions.

The Naval Postgraduate School developed PanSat. At the time of
launch, PanSat spread-spectrum digital transponders were to
be available to Amateur Radio operators along with software to utilize
this technology.

The satellite is still operating, however, the spread spectrum packet
radio portion never took place. The spacecraft is now beyond it's
initial 2-year mission life, but telemetry records are still being
downloaded.

For more information, visit the official PanSat web site at:
http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS has no further information]
[05232004]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/

[08082004]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlink: 437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA
web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplink V-band 145.840 - 145.990 MHz CW/LSB
U-band 435.550 - 435.800 MHz CW/LSB
L1-band 1269.250 - 1269.500 MHz CW/LSB
L2-band 1268.325 - 1268.575 MHz CW/LSB
S1-band 2400.350 - 2400.600 MHz CW/LSB
Downlink: S2-band 2401.225 - 2401.475 MHz CW/USB
K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon: 2401.323, 24,048.035
[05232004]

SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational
Downlink: 437.075 MHz
Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz
Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
callsign KE6QMD, as per the user service agreement located at the
following
URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Semi-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

AO-49 (SAFIR-M) is a German amateur radio payload onboard the small
German
scientific satellite "RUBIN-2".

AO-49 was built by the German amateur radio association "AATiS
e.V." (German acronym for "Arbeitskreis Amateurfunk und Telekommunikation
in der Schule", which means: 'working group for amateur radio anand
telecommunications in schools'). AO-49 is designed as a "store and
broadcast"
system for APRS based messages, dedicated for the use of schools in
combination
with the existing WX-Net and planned buoy experiments in Germany.

No transmissions detected since the 1st of February 2003! It appears
AO-49 is not properly aligned to illuminate the solar panels. This
should end soon. Due to its orbit, AO-49 will be in a phase without
eclipses until 13Feb03.

Martin DG8UAU has written a small software program "SAFIR-M Decoder" to
allow decoding of the received DATA0 frames. It is available at:
http://amend.gmxhome.de in the section Aktuelles.

Details on AO-49 (SAFIR-M) can be found at:
http://amend.gmxhome.de

Information about AATiS e.V. is available at:
http://www.aatis.de
[05092004]
NNNN
/EX

SB SAT @ AMSAT <KB9MMC $ANS-282.S4
WSR 282 Part 4 10/09/2005

AMSAT NEWS SERVICE BULLETIN 282.S4 FROM AMSAT HQ
SILVER SPRING, MD, OCTOBER 02,2005
TO ALL RADIO AMATEURS
BID: $ANS-282.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE
PROPOSED FOR LAUNCH AT THIS TIME:

UCISAT ?O-??
Catalog number:
Proposed Launch Date: October 31, 2005

Status: Under Construction

Downlink: Submission in Progress
Uplink: Submission in Progress
Callsign: Submission in Progress

This from Matt Bennett, KF6RTB, UCISAT Communications Team Member:

Our website is www.ucisat.net .This is a new website, however, and
doesn't have the "Status" section active yet. Because of the growing
interest in
our project, I'll push our webmaster to create updates (hopefully) on a
week-to-week basis. For now, the current status of the mission is as
follows:

-Expected Launch Date: October 31st, 2005
-Frequency Allocation: Submission in Progress
-Construction Status: Sub-Assembly
[WSR to thank Matt Bennett, KF6RTB, for this week's report.]
[01302005]
=====
SSETI ?O-??
Catalog Number:
Proposed Launch Date: LATE 2005

Status: AWAITING LAUNCH

Graham, G3VZV reports:
Dear all,

Unfortunately we have just learnt that we have an INDEFINITE launch delay.

This is due to one of the spacecraft on the launch, "SINAH", having suffered a significant failure and not being ready to fly.

Early indications suggest that we have a delay of at least one month, but this is not confirmed.

The launch campaign team will make the spacecraft and the ground support equipment safe and then come home.

This is, of course, very unfortunate, but it is not critical! The spacecraft can easily wait for the new launch date without any significant problems, and we will fly it as soon as we can.

In the meantime please cancel all arrangements for your national launch events.

We'll get there eventually.

Watch this space...

Neil

SpaceDaily has a report about SSETI at:
http://www.spacedaily.com/news/internet-04zzzu.html

You can find more info about SSETI at:
http://sseti.gte.tuwien.ac.at/WSW4/

Latest news about SSETI can be found at:
http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php

Look at the website for the SSETI Express webcam
http://sseti.gte.tuwien.ac.at/WSW4/webcam.htm

[ANS thanks Graham, G3VZV for the above information]
[09252005]
=====
PHASE 3E ?O-??
Catalog Number:
Proposed Launch Date: Early 2006

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/

[ANS-WSR wishes to thank William Leijenaar, PE1RAH for this week's report]
[10022005]
=====

CP1 ?o-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N6CP
Proposed Transmit Frequency: 436.845
[03272005]
=====
CP2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.325
[03272005]
=====
HAUSAT1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: D90HP
Proposed Transmit Frequency: 437.465
[03272005]
=====
ICE Cube 1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: W2CXM
Proposed Transmit Frequency: 437.305
[03272005]
=====
ICE Cube 2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N2VR
Proposed Transmit Frequency: 437.425
[03272005]
=====
ION ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.505
[03272005]
=====
KUTEsat ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: KC0RMW
Proposed Transmit Frequency: 437.385
[03272005]
=====
MEROPE ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: K7MSU-1
Proposed Transmit Frequency: 145.980
[03272005]
=====
nCUBE1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
2407.25
[03272005]
=====
RINCON ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
437.345
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SEEDS ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: JQ1YGU
Proposed Transmit Frequency: 437.485
[03272005]

=====
Mea Huaka ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.405
[03272005]
=====
SUITSAT ?O-??
Catalog Number:
Proposed Release Date: December 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: TBA

A video of the progress of Suitsat can be found at the following URL:
http://www.amsat.org/amsat-new/information/videoNews.php

To be released from an airlock of the International Space Station some
time
in December of 2005.
[10022005]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satelite Report Editor is James K. Darrow, KB9MMC.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

392. Re: WSR-282 AMSAT Weekly Satellite Report

Newsgroup: rec.radio.amateur.space
Date: 2005-10-12 23:46:27 UTC
From: Falky foo <falkyfoo@bonksbcglobal.net>
Message-ID: <nfh3f.784$q%.210@newssvr12.news.prodigy.com>
Source record: 1856

damn honey.. for a girl you're very technical..

"JoAnne Maenpaa" <wb9jej_no-spam@earthlink.net> wrote in message
news:ndu2f.12497$QE1.5829@newsread2.news.atl.earthlink.net...
> This report is organized into 4 parts.
> Part 1 - operational analog amateur satellites.
> Part 2 - operational digital amateur satellites.
> Part 3 - non - operational satellites
> Part 4 - proposed satellites
>
> SB SAT @ AMSAT <KB9MMC $ANS-282.S1

393. ANS-289 AMSAT News Service Weekly Bulletin

Newsgroup: rec.radio.amateur.space
Date: 2005-10-17 14:38:28 UTC
From: JoAnne Maenpaa <wb9jej_no-spam@earthlink.net>
Message-ID: <EHO4f.15629$vw6.4317@newsread1.news.atl.earthlink.net>
Source record: 1857

AMSAT NEWS SERVICE
ANS-289

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* AMSAT Meeting Internet Success
* PCSAT2 and WB4APR Featured in Magazine Article
* SSETI Update - New Handbook Available
* ARISS Status for the week of October 10, 2005
* AMSAT Project EAGLE Volunteer Opportunity

SB SAT @ AMSAT $ANS-289.01
AMSAT Meeting Internet Success

AMSAT News Service Bulletin 289.01
>From AMSAT HQ SILVER SPRING, MD.
October 16, 2005
To All RADIO AMATEURS
BID: $ANS-289.01

Following the success of the first ever internet connectivity via Echolink for the AMSAT General Meeting held on October 7 in Pittsburgh, the Board of Directors plans to repeat this feature for members when the logistics next allow. During the meeting, those in the room at Pittsburgh participated with other members in 12 countries via Echolink.

"This is really cool", in the words of AMSAT President Rick Hambly, W2GPS, "It was difficult working out the logistics, but it worked!" Rick further commented that, "We got the message. We conducted a successful meeting because we were open and in touch with the membership."

AMSAT members wishing to participate in future internet sessions are invited to begin learning about Voice Over IP (VoIP) technology and configuring their amateur station computers. Plans are in motion to publish updated "how-to" information on the AMSAT web and in the Journal. In the meantime here are two

references to begin your research:

Home page of the Echolink software
http://www.echolink.org/

ARRL article on VoIP and Amateur Radio:
http://www.arrl.org/qst/2003/02/VoIP.pdf

[ANS thanks the AMSAT Board for the above information]

/EX

SB SAT @ AMSAT $ANS-289.02
PCSAT2 and WB4APR Featured in Magazine Article

AMSAT News Service Bulletin 289.02
>From AMSAT HQ SILVER SPRING, MD.
October 16, 2005
To All RADIO AMATEURS
BID: $ANS-289.02

Shipmate, the magazine of the US Naval Academy Alumni Association, discusses the success of the PCSAT2 mission in an article titled, "Out of this World, USNA Satellite Flies Aboard ISS". Bob Bruninga, WB4APR is interviewed about his participation with his students in the PCSAT2 project.

AMSAT has received permission to re-post this article on-line at:
http://www.amsat.org/amsat-new/articles/PCSat2/PC-Sat2_Shipmate.pdf

[ANS thanks Martha Thorn, Shipmate Magazine, and Jim Sanford WB4GCS for the above information.]

/EX

SB SAT @ AMSAT $ANS-289.03
SSETI Update - New Handbook Available

AMSAT News Service Bulletin 289.03
>From AMSAT HQ SILVER SPRING, MD.
October 16, 2005
To All RADIO AMATEURS
BID: $ANS-289.03

The SSETI Express Handbook has been updated. The latest version can be downloaded free of charge from the AMSAT-UK website at:

http://www.uk.amsat.org/

In is also available in Japanese thanks to the work of Toyo Komatsu, JA0CQP

The new Keplerian elements for a SSETI Express launch at 06:52:26 UTC on October 27th are also on the AMSAT-UK website. These were provided by Viktor Kudielka, OE1VKW.

[ANS thanks Trevor, M5AKA for the above information]

/EX

SB SAT @ AMSAT $ANS-289.04
ARISS Status for the week of October 10, 2005

AMSAT News Service Bulletin 289.04
>From AMSAT HQ SILVER SPRING, MD.
October 16, 2005
To All RADIO AMATEURS
BID: $ANS-289.04

1. ARISS School Contacts Successful

On Wednesday, October 5, Greg Olsen, KC2ONX, participated in his first ARISS contact as he spoke to students at Princeton High School in Princeton, New Jersey The audio was streamed over the internet, courtesy of MCI, and was fed through the Echolink AMSAT and EDU_NET servers.

Students from Fort Hamilton High School in Brooklyn, New York enjoyed a contact with Greg Olsen, KC2ONX, via the telebridge station, VK5ZAI, in Australia. On Thursday, October 6, ten students asked 13 questions of the space traveler while the student body of 4500 children listened in. The audio was also fed through Echolink, and thirty stations (including 3 repeater nodes) from twelve countries tied in: USA, UK, Brazil, Chile, Germany, Thailand, Japan, Holland, Russia, Australia, India, and Romania.

On October 7, Greg Olsen, KC2ONX, spoke with students at Ridgefield Park High School (Olsen's alma mater) in Ridgefield Park, New Jersey via the telebridge station ZS6BTD in South Africa. The audio was fed through Echolink, as twenty connections, of which 4 were repeater nodes, were made from stations in Germany, Thailand, UK, USA, Japan, Holland, Russia, and South Africa.

2. ARRL Article on Space Visitor

ARISS provided pass times to Greg Olsen so that he could make contacts with the general public, as time allowed. ARRL ran an article, which included the pass times, entitled, "'Space Tourist' May Get on the Air from NA1SS for Casual Contact."
See: <http://www.arrl.org/news/stories/2005/10/03/2/?nc=1>

3. JOTA 2005

The 2005 Jamboree on the Air (JOTA) was held on Saturday and Sunday, October 15-16. The event encourages both Boy Scouts and Girl Scouts to become involved with amateur radio. Expedition 12 crew members were heard on the 145.800 MHz downlink as NA1SS, the amateur station aboard the ISS, participated in JOTA.

4. Space Times Article on ISS Ham Radio

Space Times, a publication of the American Astronautical Society ran an article in its July/August 2005 issue which mentions the amateur radio system on board the ISS, and its use by crew members as a past time activity.

[ANS thanks Carol, KB3LKI for the above information]

/EX

SB SAT @ AMSAT $ANS-289.05
AMSAT Project EAGLE Volunteer Opportunity

AMSAT News Service Bulletin 289.05
>From AMSAT HQ SILVER SPRING, MD.
October 16, 2005
To All RADIO AMATEURS
BID: $ANS-289.05

Gould Smith, WA4SXM wrote, "I was privileged to attend the second EAGLE planning meeting. First - the EAGLE project is very much alive and progressing quite well. Granted, I had some concerns going into the meetings, but these were quickly put to rest. The project has excellent leadership, excellent technical expertise, a great deal of actual satellite experience and a wonderful 'get it done' attitude from all the teams."

The open design and development concept for EAGLE should be quite informative to those of us outside the design team. We will have a great opportunity to learn more about what goes into making the decisions about the spacecraft, its orbit and its operational modes. In addition, we all now assume the responsibility to make this the best thought out, documented and tested amateur satellite ever.

So, following in the age old AMSAT tradition of volunteering to fill a need, I have volunteered to help communicate what is going on with the EAGLE project.

This a short introduction to many updates coming over the next months and years as the AMSAT-NA EAGLE satellite project matures into an orbiting satellite. I am planning on releasing a report at least once a month and more often when important information becomes available. This report will be available through the AMSAT BB and on the EAGLE website.

There already is so much to write about that I am going to have to break it down into different areas on each report, because I won't have time to write about all the areas in each report. There are many separate, parallel efforts going on during this early stage. As these separate projects mature, the integration and coordination of these modules into the EAGLE satellite should prove to be a fascinating journey.

One of the items discussed was the 2006 EAGLE budget. As you can see from the EAGLE project thermometer on the AMSAT EAGLE site, $33k won't go very far. It is time to start purchasing items for development and EAGLE needs your support both as a volunteer and as a donor. You can do both of these

on the AMSAT web site.

I am interested in some people to help me take the raw technical information provided by the project teams and put this into a more digestible
format. Let me know if you are interested by e-mail to wa4sxm@amsat.org.

[ANS thanks Gould, WA4SXM for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
JoAnne Maenpaa, WB9JEJ
WB9JEJ at amsat dot org

394. WSR-289 AMSAT Weekly Satellite Report

Newsgroup: rec.radio.amateur.space
Date: 2005-10-17 14:39:35 UTC
From: JoAnne Maenpaa <wb9jej_no-spam@earthlink.net>
Message-ID: <HIO4f.15630$vw6.15617@newsread1.news.atl.earthlink.net>
Source record: 1858

```
This report is organized into 4 parts.
Part 1 - operational analog amateur satellites.
Part 2 - operational digital amateur satellites.
Part 3 - non - operational satellites
Part 4 - proposed satellites

SB SAT @ AMSAT <KB9MMC $ANS-289.S1
WSR 289 Part 1 10/16/2005

AMSAT NEWS SERVICE BULLETIN 289.S1 FROM AMSAT HQ
SILVER SPRING, MD, OCTOBER 16, 2005
TO ALL RADIO AMATEURS
BID: $ANS-289.S1

VO-52 HAMSAT
Catalog Number: 28650
Launch Date: May 05,2005

Status: Testing
Current Mode: U/V

Proposed frequencies:
--------------------
Indian transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacom : 145.940MHz continue carier signal

Dutch transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacon : 145.860MHz 12WPM with CW message
[07242005]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - ON
FM REPEATER - V/U

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
Analog voice uplink: 145.880 MHZ FM
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone
```

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

[ANS-WSR thanks Mike Kingery, KE4AZN for the above information]
[10162005]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz (67.0 Hz PL tone) (See below for operating
procedures)
Downlink: 436.795 MHz

There have been unconfirmed reports on the amsat-bb remailer that SO-50
has shifted downlink frequency as much as 5khz up. This both from Europe.

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary)

1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm
the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT
the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window
will reset the 10 minute timer.
[09122004]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplink: 145.850 145.870 145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

John, N4QWL reports on July 16th, 2005:

Last evening I had a AOS to LOS qso with WI2W. FO-29 came up at 01:17z
here in FM07 and I found WI2W and we chatted until 01:33z. The satellite was
at 2 degrees elevation when I finally heard him start to crackle a bit. What
a great QSO! To think that I watched this bird launch back in 1996 and it
is still working so well is a real thrill. I believe I still have the
video. I might just look for it and watch it again. Boy do I love this
satellite stuff! Look for you all up there.

Please send the reception reports to lab2 'at' jarl.or.jp.
Please use the subject line: 'FO-29 reception report'.

Mineo, JE9PEL, has an FO-29 satellite telemetry analysis program that
will automatically analyze all digital telemetry from the satellite (such as
current, voltage and temperature). FO29CWTE is available at:
http://www.ne.jp/asahi/hamradio/je9pel/
[ANS-WSR wishes to thanks John, N4QWL for this week's report]
[07172005]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

The latest information on AO-27 from control operator Michael Wyrick,
N3UC (former N4USI), can be found at:
http://www.ao27.org

An AO-27 question-and-answer page is available on the AMSAT-NA web
site, with updates by Ray, W2RS. The URL is:
http://www.amsat.org/amsat/intro/ao27faq.html

[ANS-WSR thanks John, K6YK, for this week's AO-27 report]
[08292004]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Semi-operational in sunlight.
Return to active status: June 21,2002

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A
145.975 to 145.925 MHz CW/USB Mode B
Beacon: 29.502 MHz, 145.972 MHz, 435.1 MHz, 2304.1 MHz

Emily, W0EEC has created a website to allow the users of AO-7 to record
contacts, observations and use of the satellite more effectively at:
http://www.emilyshouse.com/experthams/ao7/main.php

This includes the ability to log contacts.

Tim, K3TZ has written a program to decode AO-07 telemetry.
The program can be downloaded at:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

For more AO-7 info:
http://www.amsat.org/amsat/sats/n7hpr/ao7.html
[11142004]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: U/V CROSS-BAND REPEATER
Digipeater: Inactive

The current Expedition 12 crew is:
Commander: William McArthur - KC5ACR
Flight Engineer: Valery Tokarev - (no call)

Worldwide packet uplink: 145.990 MHz FM
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM
Doppler Shift is 10 KHz

Russian callsigns: RS0ISS, RZ3DZR
USA callsign: NA1SS
Packet station mailbox callsign: RS0ISS-11
Packet station keyboard callsign: RS0ISS-3
Digipeater callsign: ARISS

The ISS daily crew schedule can be found at:
http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.

More information is available at:
http://www.rac.ca/ariss
http://spaceflight.nasa.gov/station/reference/radio/
http://www.marexmg.org/fileshtml/unprotopage.html
http://www.issfanclub.com
http://oscar.dcarr.org/
[10162005]
NNNN
/EX

SB SAT @ AMSAT <KB9MMC $ANS-289.S2
WSR 289 Part 2 10/16/2005

AMSAT NEWS SERVICE BULLETIN 289.S2 FROM AMSAT HQ
SILVER SPRING, MD, OCTOBER 16, 2005
TO ALL RADIO AMATEURS
BID: $ANS-289.S2

PCSAT2 ?0-??
Catalog Number:
Launch Date: August 1, 2005

Status: Operational

PCSAT2 was installed on the exterior of the International Space Station and was activated on August 3, 2005.

PCSAT2 CAPABILITIES: PCSAT2 is attached to the ISS and so its operations must be in cooperation with the ARISS communications suite to minimize any mutual interference and to coordinate activities. Here are the capabilities of the PCSAT2 and ARISS payloads:

PCSAT SYSTEM A:

435.275 PCSAT2 DOWNLINK 1200 baud packet with uplink on 145.825
435.275 PCSAT2 DOWNLINK Occasional user PSK-31 continuous downlink
145.825 PCSAT2 DOWNLINK 1200 baud packet

PCSAT SYSTEM B:

437.975 PCSAT2 DOWNLINK periodic Solar Cell data and PCSAT2 telemetry at 9600 baud
437.975 PCSAT2 DOWNLINK TNC-B command downlink at 1200 baud
437.975 PCSAT2 DOWNLINK User Voice Repeater with VHF uplink
437.975 PCSAT2 DOWNLINK Packet digipeater with VHF uplink

It looks like PCSAT2 can best contribute at this time by operating in PSK-31 mode for the near future. This is a very exciting new transponder mode which solves the congestion problem on FM repeaters by letting multiple stations all communicate at the same time.

PSK-31 users are welcome to try out the new PCSAT2 PSK-31 transponder on ISS with an uplink on 29.402 +/- 1 KHz and downlink on 435.275 +/- Doppler using FM.

The FM downlink lets everyone operate full duplex and everyone to see the same view of the passband as everyone else. THus you can see exactly
what your signal looks like to everyone else.

Help Wanted:

Here is your chance to become a viable part of the Amateur Satellite Community.

We are looking for a volunteer satellite packet
station in Hawaii that is interested in helping with
telemetry and sat-gating of PCSAT2 and
ARISS packets. Requirements are:

1) General familiarity with packet
2) TNC connected to a cross band radio that
can RX on UHF and TX on VHF.
3) modest UHF beam and rotator system.

Contact WB4APR for more information.

Packets seen from PCSAT2 can be reviewed at:
http://www.findu.com/cgi-bin/pcsat2.cgi

A screen shot of both the 9600 bps and 1200 bps decoded data
as seen by Simon, 9W2QC, can be seen at:
http://www.9w2qc.net/pcsat2/

More information on PCSAT2 can be found at:
http://web.usna.navy.mil/~bruninga/pcsat2.html

[ANS-WSR thanks Bob, WB4APR and the U.S. Naval Academy Satellite Lab for
the aboveinformation.]

[08282005}
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - ON
FM REPEATER - V/U HIGH POWER

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
Analog voice uplink: 145.880 MHz FM
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

[ANS-WSR thanks Mike Kingery, KE4AZN for the above information]
[09252005]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Non-Operational?????

Uplink/downlink: 145.827 MHz 1200 baud AX.25 AFSK via W3ADO-1
Aux/Uplink: 435.250 MHz 9600 baud via PCSAT-2 (off)
APRS Downlink: 144.390 MHz (Region 2)

PCSat is a 1200-baud APRS digipeater designed for use by stations using hand-held or mobile transceivers. Downlinks feed a central web site at: http://pcsat.aprs.org

The APRS-equipped PCSat was built by midshipmen from the U.S. Naval Academy under the guidance of Bob Bruninga, WB4APR.
[07242005]
=====
CUTE-1
Catalog number: 27844
Launched: June 30,2003

Status: Operational

Uplink: ?
Downlink: 436.8375 CW
437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)
Cliff, K7RR reports:
In the latest Weekly Satellite Report, CUTE 1, #27844 is listed as OPERATIONAL?
Indeed it is very operational as a CUBESAT sending CW telemetry on 436.8345 MHz. At the July 7 2005, 23:45:20 pass over the Western USA:
CUTE 1 6B A4 xx 7F D7 66A8 4702 FF FF7C 65
CUTE 1 6C A6 59 80 D9 66A8 4702 FF FE7C B6

The June 30th KEPS were within ten seconds of AOS and LOS. It is an very good object to practice tracking as the orbit and transmitter power are similar to proposed CUBESATS awaiting launch this December. As a check for Doppler correction, the lack of change in tone is an excellent indicator.

CUTE 1 is a Japanese (Tokyo Institute of Technology) one kilogram nanosatellite that was launched by a Rokot rocket from Plesetsk at 14:15 UT on 30 June 2003. It carries a 100 mW beacon at 436.8375 MHz. Initial orbital parameters were period 101.4 min, apogee 831 km, perigee 819 km, and inclination 98.7?.

For further info about CUTE-1 goto:
http://lss.mes.titech.ac.jp/ssp/cubesat/operation/Schedule_e.html

[ANS WSR wishes to thank Cliff, K7RR, for this week's information]
[07242005]
=====
GO-32 TECHSAT-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
(435.325 n/a - temperature problems)
Uplinks: 145.850, 145.890, 145.930 FM
1269.700, 1269.800, 1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[03132005]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink: 145.850 or 145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz
Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[05152005]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for
APRS users.

Uplink: 145.90 145.92 145.94 145.96 MHz FM
(using 1200-baud Manchester FSK)
Downlink: 437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon: 2401.1428 MHz
Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

A WOD collection of current graphics along with general information
and telemetry samples can be found at:
http://www.telecable.es/personales/ea1bcu
[05092004]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational?

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK).
approx. 10 days ON, 10 days OFF
Mode-S Beacon: 2401.500 MHz. ... OFF
UHFBeacon: 435.025 MHz. ... OFF

OSCAR-11 is back! I received the good news, on Saturday morning, while at the AMSAT-UK Colloquium. This was entirely unexpected! On Sunday morning Bob G4VRC played me a recording of an early morning pass received that day.

During the period 21 July to 14 August 2005 consistent signals have been heard from 30 July to 08 August. Signals seem to be weaker than usual, confirmed by the many reports received. However,since I last heard the satellite on 30 April, I've reinstalled my antennas , which makes comparisons difficult.

Many thanks for all the recent reports of OSCAR-11 including those from KU7Z (who heard it first), KB2M, VK6XH, HK7MKE, KA2UPW, JE9PEL, G1OCN, HB9SKA and G8OQW.

All the analogue telemetry channels, 0 to 59 are zero, ie they have failed. The status channels 60 to 67 are still working. One bit in channel 62, DSR mode, has changed from WRITE to READ. DSR is the Digital Store & Readout experiment. This could be significant if the experiment is still drawing current, but the other status bit indicates that it is switched OFF.

The on-board clock is now showing a very large error. It has lost approximately 19 days since 30 April. During the recent data collection period, the clock error has been changing at a decreasing rate. The size of the clock error and the rate at which it is changing is similar to the duration of the solar eclipse periods. This suggests that the clock might have been switching OFF during eclipses.

The eclipses have now ended, and the satellite should be in continuous sunlight for the remainder of this year, and well into next year. This should help the satellite to continue transmitting, although continuous sunlight can cause problems due to excessive temperatures.

If the watchdog timer is still operating on a 20 day cycle, ie. approximately ten days ON followed by 10 days OFF, then the VHF beacon should resume transmissions around 18 August.

The Beacon frequencies are -

VHF 145.826 MHz. AFSK FM ASCII Telemetry

UHF 435.025 MHz. OFF

S-band 2401.5 MHz. OFF

Listeners to OSCAR-11 may be interested in visiting my website which contains an archive of news & telemetry data. It also contains details

about using a soundcard or hardware demodulators for data capture.
There is software for capturing data, and decoding ASCII telemetry. The
URL is www.users.zetnet.co.uk/clivew/

If you place this bulletin on a terrestrial packet network, please use
the bulletin identifier $BID:U2RPT112.CWV, to prevent duplication.

[ANS-WSR thanks Clive, G3CWV, for the above information]

More information on UO-11 OSCAR-11 can be found at:
http://www.users.zetnet.co.uk/clivew/

MPEG3 files can be found here at Mineo, JE9PEL website:
http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm

[08212005]
NNNN
/EX

SB SAT @ AMSAT <KB9MMC $ANS-289.S3
WSR 289 Part 3 10/16/2005

AMSAT NEWS SERVICE BULLETIN 289.S3 FROM AMSAT HQ
SILVER SPRING, MD, OCTOBER 16, 2005
TO ALL RADIO AMATEURS
BID: $ANS-289.S3

THE FOLLOWING ARE IN ORBIT BUT ARE
NON-OPERATIONAL AT THIS TIME:

POSAT-1 PO-28
Catalog Number: 22829
Launched : September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 435.250 MHz
435.275 MHz

Uplink: 145.925 MHz
145.975 MHz

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

PO-28 (POSAT-1), Portugal's first satellite, launched 12 years ago,
will be turned over to Amateur Radio use in the very near future. That
was the word July 30 from AMSAT-UK Secretary Jim Heck, G3WGM, during the
AMSAT-UK International Space Colloquium in Guildford, England.

Launched September 25, 1993, the satellite operated as a packet store-
and-forward BBS (9600 baud FM FSK) on Amateur Radio frequencies for
several weeks in early 1994. Over the years, PO-28's primary usage has been
commercial, although plans have called for eventually shifting its operation
to ham radio use. G3WGM reports that following lengthy negotiations it has

been agreed that the satellite can be switched permanently to amateur frequencies. The changeover is expected to take a couple of weeks.

The Portuguese satellite was built at the University of Surrey as part of a collaborative satellite technology program that involved industry and academe. Uplink frequencies will be 145.925 and 145.975 MHz. Downlink frequencies will be 435.250 and 435.275 MHz. More information on PO-28 is on the AMSAT Web site http://www.amsat.org/amsat/sats/n7hpr/po28.html.

Uplink Frequencies: 145.925 and 145.975 MHz
Downlink Frequencies: 435.250 and 435.275 MHz

Orbit: 822 x 800 km, 98.6 deg inclined, sun-synchronous.

Transponder capabilities include FM repeater and 38k4 data. If you want to hear how loud this satellite is, listen on 429.950 until the change back to amateur radio service.

Keplerian elements for PO-28 are not currently contained in the AMSAT keps bulletins, but can be found at Celestrak in amateur.txt using the name "POSAT". Users of Space Track should query the NORAD Satellite ID number 22829. The name listed by Space Track is "EYESAT A".

More information of POSAT-1 can be found at:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
http://www.amsat.org/amsat/sats/n7hpr/po28.html
[ANS-WSR wishes to thanks Trevor, M5AKA and Jim, G3WGM, for this week's information.]
[08072005]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon: 145.810 MHz (unmodulated carrier)

AO-10 has been locked into a Mode-B, 70-cm uplink and 2-meter downlink for several years.

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Non-operational

Uplink: 145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink: 435.812 MHz SSB
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Alberto E. Zagni - I2KBD reports on 02/13/05
The spacecraft is in MBL (safe mode) and is trasmitting just 6 channels
of telemetry. Temperatures and voltage are nominal, but there seems to
be a problem with the onboard receiver, refusing to accept commands.
The spacecraft was launched in 1993, thus nearing 12 years in orbit...

Best regards
Alberto E. Zagni - I2KBD
ITAMSAT Mission Director

More information of IO-26 can be found at:

http://joshua.micronet.it/english/itamsat/itamsathome.html
http://www.amsat.org/amsat/sats/n7hpr/io26.html
www.itamsat.org

[02132005]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon: 29.408 MHz
Robot: 29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB
Beacon: 145.860 MHz
Robot: 145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM

[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB
Beacon: 29.352 MHz (intermittent)
SSB meeting frequency: 29.380 MHz (unofficial)

John, KD6PAG reports on June 16, 2004 to ANS:
RS-15 beacon seemed to be back in the mode where it's a tone about 5
seconds off and then 5 seconds on this morning.

ANS is looking for more confirmations of RS-15 coming back.

[ANS thanks John, KD6PAG for RS-15 information]
[06202004]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplink: 145.84 145.86 145.88 145.90 MHz FM
(using 1200-baud Manchester FSK)
CW downlink: 437.125 MHz
Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)
Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]
=====
FO-20 JAS-1b
Catalog number: 20480

Launch Date: February 07, 1990

Status: Non-Operational

Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM
Broadcast Callsign: HLO1-11
BBS: HLO1-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a
non-operational status.
[05092004]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM (9600-baud FSK)
Downlink: 436.500 MHz FM
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink frequency (listed on the PanSat web site) 436.500 MHz

The satellite is not available for general uplink transmissions.

The Naval Postgraduate School developed PanSat. At the time of
launch, PanSat spread-spectrum digital transponders were to
be available to Amateur Radio operators along with software to utilize
this technology.

The satellite is still operating, however, the spread spectrum packet
radio portion never took place. The spacecraft is now beyond it's
initial 2-year mission life, but telemetry records are still being
downloaded.

For more information, visit the official PanSat web site at:
http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS has no further information]
[05232004]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlink: 437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA
web site at the following URL:

ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplink V-band 145.840 - 145.990 MHz CW/LSB
U-band 435.550 - 435.800 MHz CW/LSB
L1-band 1269.250 - 1269.500 MHz CW/LSB
L2-band 1268.325 - 1268.575 MHz CW/LSB
S1-band 2400.350 - 2400.600 MHz CW/LSB
Downlink: S2-band 2401.225 - 2401.475 MHz CW/USB
K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon: 2401.323, 24,048.035
[05232004]

SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational
Downlink: 437.075 MHz
Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz
Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
callsign KE6QMD, as per the user service agreement located at the
following
URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Semi-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

AO-49 (SAFIR-M) is a German amateur radio payload onboard the small
German
scientific satellite "RUBIN-2".

AO-49 was built by the German amateur radio association "AATiS
e.V." (German acronym for "Arbeitskreis Amateurfunk und Telekommunikation
in der Schule", which means: 'working group for amateur radio anand
telecommunications in schools'). AO-49 is designed as a "store and
broadcast" system for APRS based messages, dedicated for the use of
schools in combination with the existing WX-Net and planned buoy
experiments in Germany.

No transmissions detected since the 1st of February 2003! It appears
AO-49 is not properly aligned to illuminate the solar panels. This
should end soon. Due to its orbit, AO-49 will be in a phase without
eclipses until 13Feb03.

Martin DG8UAU has written a small software program "SAFIR-M Decoder" to
allow decoding of the received DATA0 frames. It is available at:
http://amend.gmxhome.de in the section Aktuelles.

Details on AO-49 (SAFIR-M) can be found at:
http://amend.gmxhome.de

Information about AATiS e.V. is available at:
http://www.aatis.de
[05092004]
NNNN
/EX

SB SAT @ AMSAT <KB9MMC $ANS-289.S4
WSR 289 Part 4 10/16/2005

AMSAT NEWS SERVICE BULLETIN 289.S4 FROM AMSAT HQ
SILVER SPRING, MD, OCTOBER 16,2005
TO ALL RADIO AMATEURS
BID: $ANS-289.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE
PROPOSED FOR LAUNCH AT THIS TIME:

UCISAT ?O-??
Catalog number:
Proposed Launch Date: October 31, 2005

Status: Under Construction

Downlink: Submission in Progress
Uplink: Submission in Progress
Callsign: Submission in Progress

This from Matt Bennett, KF6RTB, UCISAT Communications Team Member:

Our website is www.ucisat.net .This is a new website, however, and
doesn't have the "Status" section active yet. Because of the growing
interest in our project, I'll push our webmaster to create updates
(hopefully) on a week-to-week basis. For now, the current status of
the mission is as follows:

-Expected Launch Date: October 31st, 2005
-Frequency Allocation: Submission in Progress
-Construction Status: Sub-Assembly
[WSR to thank Matt Bennett, KF6RTB, for this week's report.]
[01302005]
=====
SSETI ?O-??
Catalog Number:
Proposed Launch Date: LATE 2005

Status: AWAITING LAUNCH

Graham, G3VZV reports:
Dear all,

Unfortunately we have just learnt that we have an INDEFINITE launch
delay.

This is due to one of the spacecraft on the launch, "SINAH", having
suffered a significant failure and not being ready to fly.

Early indications suggest that we have a delay of at least one month,
but this is not confirmed.

The launch campaign team will make the spacecraft and the ground support
equipment safe and then come home.

This is, of course, very unfortunate, but it is not critical! The
spacecraft can easily wait for the new launch date without any significant
problems, and we will fly it as soon as we can.

In the meantime please cancel all arrangements for your national launch events.

We'll get there eventually.

Watch this space...

Neil

SpaceDaily has a report about SSETI at:
http://www.spacedaily.com/news/internet-04zzzu.html

You can find more info about SSETI at:
http://sseti.gte.tuwien.ac.at/WSW4/

Latest news about SSETI can be found at:
http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php

Look at the website for the SSETI Express webcam
http://sseti.gte.tuwien.ac.at/WSW4/webcam.htm

[ANS thanks Graham, G3VZV for the above information]
[09252005]
=====
PHASE 3E ?O-??
Catalog Number:
Proposed Launch Date: Early 2006

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/

[ANS-WSR wishes to thank William Leijenaar, PE1RAH for this week's report]
[10022005]
=====
CP1 ?o-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N6CP
Proposed Transmit Frequency: 436.845
[03272005]
=====
CP2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.325
[03272005]
=====
HAUSAT1 ?O-??

Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: D90HP
Proposed Transmit Frequency: 437.465
[03272005]
=====
ICE Cube 1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: W2CXM
Proposed Transmit Frequency: 437.305
[03272005]
=====
ICE Cube 2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N2VR
Proposed Transmit Frequency: 437.425
[03272005]
=====
ION ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.505
[03272005]
=====
KUTEsat ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: KC0RMW
Proposed Transmit Frequency: 437.385
[03272005]
=====
MEROPE ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: K7MSU-1
Proposed Transmit Frequency: 145.980
[03272005]
=====
nCUBE1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
2407.25
[03272005]
=====
RINCON ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
437.345
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SEEDS ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: JQ1YGU
Proposed Transmit Frequency: 437.485
[03272005]
=====
Mea Huaka ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.405
[03272005]
=====
SUITSAT ?O-??
Catalog Number:
Proposed Release Date: December 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: TBA

A video of the progress of Suitsat can be found at the following URL:
http://www.amsat.org/amsat-new/information/videoNews.php

To be released from an airlock of the International Space Station some
time
in December of 2005.
[10022005]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satelite Report Editor is James K. Darrow, KB9MMC.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

395. ESA calls radioamateurs

Newsgroup: rec.radio.amateur.space
Date: 2005-10-18 19:07:57 UTC
From: Thierry <->
Message-ID: <4355480d$1@news.vo.lu>
Source record: 1859

Hi ,

For info
http://www.esa.int/SPECIALS/sseti_express/SEMARJ7X9DE_0.html

73
Thierry, ON4SKY

--
Auteur de "Un si�cle de Physique, 1- La Physique Quantique" aux �ditions
AEGEUS
D�tail sur : http://www.astrosurf.org/lombry

396. Re: ESA calls radioamateurs

Newsgroup: rec.radio.amateur.space
Date: 2005-10-18 20:10:17 UTC
From: Rene Altena <pa2ra-verwijder@amsat.org>
Message-ID: <435556aa$0$25789$ba620dc5@text.nova.planet.nl>
Source record: 1860

"Thierry" <-> wrote in message news:4355480d$1@news.vo.lu...
> Hi ,
>
> For info
> http://www.esa.int/SPECIALS/sseti_express/SEMARJ7X9DE_0.html
>

What is new about this? It was news a month ago!

Rene

397. NASA Terra and Aqua Satellites

Newsgroup: rec.radio.amateur.space
Date: 2005-10-20 10:55:11 UTC
From: David Findlay <david@davsoft.com.au>
Message-ID: <4357778f$0$28011$5a62ac22@per-qv1-newsreader-01.iinet.net.au>
Source record: 1861

Do either of these satellites downlink images as the go over like the NOAA sats do? Thanks,

David

398. ANS-296 AMSAT Weekly News Service Bulletin

Newsgroup: rec.radio.amateur.space
Date: 2005-10-25 16:23:44 UTC
From: JoAnne Maenpaa <wb9jej_no-spam@earthlink.net>
Message-ID: <k_s7f.1141$AS6.935@newsread3.news.atl.earthlink.net>
Source record: 1862

AMSAT NEWS SERVICE
ANS-296

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* SSETI Express Readies for Launch October 27
* P3-E Satellite News and Project Report
* Jamboree on the Air Satellite Success
* Reminder of ARISS Resources on the Web
* ARISS Status for the Week of October 17, 2005
* AMSAT Awards

SB SAT @ AMSAT $ANS-296.01
SSETI Express Readies for Launch October 27

AMSAT News Service Bulletin 296.01
From AMSAT HQ SILVER SPRING, MD.
October 23, 2005
To All RADIO AMATEURS
BID: $ANS-296.01

The SSETI Express satellite is still scheduled to launch at 06:52 UTC on Thursday, October 27 on board a Kosmos 3M launcher.

The launch team arrived in Moscow and next completed an 18 hour journey by train to Plesetsk. The ISC (integrated system check) was completed satisfactorily within a couple of hours of powering up. All the systems are OK. The propulsion tank had maintained the required 300 bar pressure. Both UHF and S band radios were also tested - including the transponder and DTMF telemetry configurations.

Final battery charging was performed over the weekend. SSETI Express will be joined with the other four satellites on the launch adaptor on Monday, October 24. The launch adaptor will itself then be integrated onto the rocket.

Roll out of the complete launch vehicle at the launch complex (approx 40 kilometres away from the assembly facility) is scheduled for very

early on Wednesday morning and its erection to the vertical position
will take place around midday. The launch team will then pack up all
the test gear and other equipment for its return to ESA ESTEC's facility
in the Netherlands to await the launch to take place the following day!

A daily report of the launch campaign is being maintained at
http://sseti.gte.tuwien.ac.at/express/mop/index.php?uri=news.html
This mission operations site is completely up-to-date regarding Kepler
TLEs and other LEOP "Launch and Early Operations Phase" details.

The SERACC software, needed to decode and submit the received data
to the SSETI database, together with some audio files containing recorded
9k6 signals to experiment with is planned for release prior to launch.

There will be two SSETI Express competitions for radio amateurs.
First is the unique "I heard it first" T shirt award; second is
the prize for amateur who submits the largest amount of valid telemetry
and payload data to the SSETI Express database before 1st February 2006.
The telemetry prize, sponsored by ESA, is rather more valuable than just
a T shirt - see the full details at:
http://sseti.gte.tuwien.ac.at/express/mop/index.php?uri=ham_contest.html

Full details of these events will be available on the Express mission
website. This includes full information about the satellite, the ESA
sponsored competition,and the plans for its use in the amateur
satellite service. See:
http://sseti.gte.tuwien.ac.at/express/mop/

The ESA website about SSETI Express is at:
http://www.esa.int/SPECIALS/sseti_express/SEMARJ7X9DE_0.html

The latest version of the SSETI Express handbook can be downloaded
free of charge from the AMSAT-UK website at:
http://www.uk.amsat.org/

A live webstream of the ESA produced TV coverage of the launch is
going to be provided by Howard G6LVB at:
http://www.streamingwizard.com/clients/space.asx

The programming on the web stream is expected to commence at
approximately 06:00 UTC on launch day.

[ANS thanks Graham, UA/G3VZV for the above information]

/EX

SB SAT @ AMSAT $ANS-296.02
P3-E Satellite News and Project Report

AMSAT News Service Bulletin 296.02
From AMSAT HQ SILVER SPRING, MD.
October 23, 2005
To All RADIO AMATEURS
BID: $ANS-296.02

Peter Guelzow, DB2OS, President AMSAT-DL and the P3-E Project leader wrote a report to update radio amateurs about the progress of the satellite:

First of all I have to apologize for the little information about the P3-E progress over the last few months. Updates were provided during presentations at the recent AMSAT-UK Colloquium. We also publish news in the AMSAT-DL magazine which is also then reprinted in the AMSAT-NA Journal. To accomodate the delays inherent in these publishing media we will provide information via the AMSAT-DL website and e-mail such as the AMSAT-BB.

To improve communications with our membership and worldwide audience, AMSAT-DL decided to improve the information flow on our website using a new content management system (CMS, Mambo). Unfortunately this took much longer than anticipated, but the new portal should be available to the public by December.

The CMS itself is almost fully functional, but we have to transfer and re-edit all the information from our old website. As you can probably imagine, this is still a lot of work. However, once it is running, we hope to put more information on-line and also have a news section with more regular updates. Indeed, because of this, we almost stopped updating the old website.

So far, AMSAT P3-E is making good progress, but slowly. Some modules have already arrived in Marburg for integration, but other module builders are making use of the additional time due to the yet unknown launch date.

The wiring harness is defined and will be built and integrated into the spacecraft soon. Thanks to the CAN-bus and our CAN-DO module controllers, it will be not such a big beast as on previous P3 satellites.

Additional radiation testing has been performed on the CAN-DO. The CAN-DO module and other selected electronic components for P3-E and P5-A were exposed to protons with an energy of 60 MeV. The CAN-DO module stopped operating at 61 krad, which is good for a projected mission duration of more than 10 years. Since the CAN-DO module is one of the most critical parts on P3-E and P5-A, this gives us a better feeling that it should not suffer from radiation induced failure. Aradiation test is also planned for the IHU-3 within the next couple of weeks.

Very good progress was also reported from the development teams of the new IHU-3, both in terms of hardware and software. While a big step forward was made, the full integration and testing of the operational IPS software and all it's functionality (including the turbo codes and software defined modems) is the next step.

In addition to the analog transponders flying on P3-E, we will also look into the possibility to have an SDT (software defined transponder) flying on P3-E for the first time. The recent developments on Software Defined Radio technologies and STELLA, may give us completely new ideas. While

this is quite late and various details must still be discussed, the necessary RF interfaces are already available in the module space. Expect to hear more about this in the future updates.

An extremely critical step was taken a few days ago when Ariane 5 scored a double success for Arianespace with the successful launch of Syracuse 3A and Galaxy 15 on-board flight V168.

While we do not yet have an official launch manifest, we are in full contact with our partners at Arianespace. Everyone is working hard to find a suitable slot for P3-E to the benefit of both sides. While the year 2005 is almost over, our target to get P3-E into orbit is still 2006 and will remain so. Clearly, the continuing success of the new Ariane 5 will help us too. Initial arrangements for environmental testing, including vibration and thermal vacuum testing are already made.

Indeed, we still need a lot of support for P3-E and donations. But with all the contributions we are receiving, P3-E will be truly another international satellite. I'm in particular delighted, that AMSAT-NA joined and supports the P3-E project. We have excellent personal relationship between our organisations and apart from the fun, things are developing really good to the benefit of EAGLE, P3-E and all the projects on the horizon.

[ANS thanks Peter Guelzow, DB2OS, President AMSAT-DL, P3-E Project leader for the above information]

/EX

SB SAT @ AMSAT $ANS-296.03
Jamboree on the Air Satellite Success

AMSAT News Service Bulletin 296.03
From AMSAT HQ SILVER SPRING, MD.
October 23, 2005
To All RADIO AMATEURS
BID: $ANS-296.03

Lee McLamb, KU4OS, reported that Troop 393 in Merritt Island, FL had an excellent time working the satellites at station W4J during the Saturday, October 15 International Scouting Jamboree on the Air.

Lee wrote, "We made 11 contacts on SO-50 and AO-51. Two Scouts also got to talk with Commander William McArthur who was calling CQ JOTA from NA1SS which resulted resulted in a lot of whooping and jumping around after each ISS pass."

Helping the Scouts with the satellites at W4J were Don AG4FC, George KF4XB and Lee KU4OS. We kept things very simple using HTs, Arrow or home brew antennas and a 2m rig in the car with a 1/4 wave whip.

Emily Clarke, W0EEC, was staffing the AMSAT booth at the Pacificon Hamfest, and invited the JOTA Scouts to use the satellite station. Several came over, but only one took the microphone. Scout Matthew

made contacts on AO-51. He and his parents were so excited they came back and Matthew again took the microphone on VO-52.

This was the first time we were in a position to have JOTA on Sats, so we learned that a) kids are shy and b) they aren't as spontaneous as we are. Matt was very cool and his parents were very excited.

The ARRL Letter included JOTA reports via ISS from KD4SFF, KB9UPS, and N5VHO. Al, KD4SFF ("scouting for fun"), worked NA1SS while waiting for scouts to arrive at his JOTA operation at Paris Mountain State Park in Greenville, South Carolina. Commander Bill McArthur, aboard the ISS, obliged KD4SFF by sending his greetings to all scouts.

"Greeting to all the scouts worldwide. It's a thrill for us today to be participating in JOTA!" McArthur said from orbit.

Al, who is the South Carolina AMSAT Area Coordinator, says he recorded his QSO and replayed it to his scout group as well as to others he contacted during JOTA. "Everyone was thrilled to hear Bill's message from the ISS!" he said.

Steve, KB9UPS, was among the others lucky enough to snag a contact with NA1SS during JOTA weekend. Amateur Radio on the International Space Station (ARISS) Ham Radio Project Engineer Kenneth Ransom, N5VHO, said McArthur's JOTA participation "wowed scouts and other hams." Among others, NA1SS also worked stations in Ontario, Virginia, New York and Texas.

Ransom said he heard McArthur work special event station W4J on the second pass over the central part of North America.

ANS looks forward to publishing other JOTA success stories. Send your report to ans-editor@amsat.org and we will publish it here.

[ANS thanks Lee, KU4OS, and Emily, W0EEC, and the ARRL Letter for the above information]

/EX

SB SAT @ AMSAT $ANS-296.04
Reminder of ARISS Resources on the Web

AMSAT News Service Bulletin 296.04
From AMSAT HQ SILVER SPRING, MD.
October 23, 2005
To All RADIO AMATEURS
BID: $ANS-296.04

The ARISS schedule page will provide you with a listing of all scheduled school contacts and questions, other ISS related websites, IRLP and Echolink websites, and instructions for any contact that may be streamed live. See:
http://www.amsat.org/amsat/ariss/news/arissnews.txt

The successful school list is available at:
http://www.amsat.org/amsat/ariss/news/Successful_ARISS_schools.rtf

An ISS Amateur Radio frequency chart for packet, voice, and crossband
repeater modes (also showing Doppler correction can be viewed at:
http://www.amsat.org/amsat/ariss/news/ISS_frequencies_and_Doppler_correction
.rtf

You can find a listing of ARISS related magazine articles at:
http://www.amsat.org/amsat/ariss/news/ARISS_magazine_articles.rtf

[ANS thanks Charlie, AJ9N for the above information]

/EX

SB SAT @ AMSAT $ANS-296.05
ARISS Status for the Week of October 17, 2005

AMSAT News Service Bulletin 296.05
From AMSAT HQ SILVER SPRING, MD.
October 23, 2005
To All RADIO AMATEURS
BID: $ANS-296.05

1. Upcoming School Contacts
Tomioka Elementary School of Urayasu in Urayasu City, Chiba,
Japan has been scheduled for an ARISS contact. It will take
place on Friday, October 28 at 10:36 UTC.

2. Article on Fort Hamilton High School Contact
On Thursday, October 6, students from Fort Hamilton High School
in Brooklyn, New York enjoyed a contact with Greg Olsen, KC2ONX.
The New York Daily News covered the event in a story, "Students
get an astro-dinary call." See:
http://www.nydailynews.com/10-07-2005/news/local/story/353274p-301193c.html

3. JOTA 2005
Bill McArthur, KC5ACR, wowed scouts and other hams as he participated
in the 2005 Jamboree on the Air (JOTA) held on October 15-16. Stations
from New York and South Carolina reported contacts with the ISS. This
annual event encourages both Boy Scouts and Girl Scouts to become involved
in amateur radio.

4. Astronaut Training
Astronauts Nicole Stott and Garrett Reisman were scheduled to attend
an amateur radio license training session on October 18.

[ANS thanks Carol, KB3LKI for the above information]

/EX

SB SAT @ AMSAT $ANS-296.06
AMSAT Awards

AMSAT News Service Bulletin 296.06
From AMSAT HQ SILVER SPRING, MD.

October 23, 2005
To All RADIO AMATEURS
BID: $ANS-296.06

Bruce Paige, KK5DO, AMSAT's Director Contests and Awards reports this week, congratulations go out to all of the following:

Marc Sanchez KD5MSS Satellite Communicators Club Award
David Stanley WI4L Satellite Communicators Club Award
Dan Hart WD8PFS Satellite Communicators Club Award

Wadhah Al-Tailji AE6QG Satellite Communications Achievement Award #422

Masahiro Arai JN1GKX 51 on 51 Award #35
Chris Martin KG7EZ 51 on 51 Award #36
Bob Lacey KF4GTA 51 on 51 Award #37

To see all the awards visit http://www.amsat.org.

[ANS thanks Bruce, KK5DO for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
JoAnne Maenpaa, WB9JEJ
WB9JEJ at amsat dot org

399. WSR-296 AMSAT Weekly Satellite Report

Newsgroup: rec.radio.amateur.space
Date: 2005-10-25 16:24:46 UTC
From: JoAnne Maenpaa <wb9jej_no-spam@earthlink.net>
Message-ID: <i%s7f.1142$AS6.701@newsread3.news.atl.earthlink.net>
Source record: 1863

```
This report is organized into 4 parts.
Part 1 - operational analog amateur satellites.
Part 2 - operational digital amateur satellites.
Part 3 - non - operational satellites
Part 4 - proposed satellites

SB SAT @ AMSAT <KB9MMC $ANS-296.S1
WSR 296 Part 1 10/23/2005

AMSAT NEWS SERVICE BULLETIN 296.S1 FROM AMSAT HQ
SILVER SPRING, MD, OCTOBER 23, 2005
TO ALL RADIO AMATEURS
BID: $ANS-296.S1

VO-52 HAMSAT
Catalog Number: 28650
Launch Date: May 05,2005

Status: Testing
Current Mode: U/V

Proposed frequencies:
-------------------
Indian transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacom : 145.940MHz continue carier signal

Dutch transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacon : 145.860MHz 12WPM with CW message
[07242005]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - ON
FM REPEATER - V/U

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
Analog voice uplink: 145.880 MHZ FM
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone
```

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

[ANS-WSR thanks Mike Kingery, KE4AZN for the above information]
[10162005]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz (67.0 Hz PL tone) (See below for operating
procedures)
Downlink: 436.795 MHz

There have been unconfirmed reports on the amsat-bb remailer that SO-50
has shifted downlink frequency as much as 5khz up. This both from Europe.

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary)

1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm
the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT
the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window
will reset the 10 minute timer.
[09122004]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplink: 145.850 145.870 145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

John, N4QWL reports on July 16th, 2005:

Last evening I had a AOS to LOS qso with WI2W. FO-29 came up at 01:17z
here in FM07 and I found WI2W and we chatted until 01:33z. The satellite was
at 2 degrees elevation when I finally heard him start to crackle a bit. What
a great QSO! To think that I watched this bird launch back in 1996 and it
is still working so well is a real thrill. I believe I still have the
video. I might just look for it and watch it again. Boy do I love this
satellite stuff! Look for you all up there.

Please send the reception reports to lab2 'at' jarl.or.jp.
Please use the subject line: 'FO-29 reception report'.

Mineo, JE9PEL, has an FO-29 satellite telemetry analysis program that
will automatically analyze all digital telemetry from the satellite (such as
current, voltage and temperature). FO29CWTE is available at:
http://www.ne.jp/asahi/hamradio/je9pel/
[ANS-WSR wishes to thanks John, N4QWL for this week's report]
[07172005]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

The latest information on AO-27 from control operator Michael Wyrick,
N3UC (former N4USI), can be found at:
http://www.ao27.org

An AO-27 question-and-answer page is available on the AMSAT-NA web
site, with updates by Ray, W2RS. The URL is:
http://www.amsat.org/amsat/intro/ao27faq.html

[ANS-WSR thanks John, K6YK, for this week's AO-27 report]
[08292004]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Semi-operational in sunlight.
Return to active status: June 21,2002

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A
145.975 to 145.925 MHz CW/USB Mode B
Beacon: 29.502 MHz, 145.972 MHz, 435.1 MHz, 2304.1 MHz

Emily, W0EEC has created a website to allow the users of AO-7 to record
contacts, observations and use of the satellite more effectively at:
http://www.emilyshouse.com/experthams/ao7/main.php

This includes the ability to log contacts.

Tim, K3TZ has written a program to decode AO-07 telemetry.
The program can be downloaded at:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

For more AO-7 info:
http://www.amsat.org/amsat/sats/n7hpr/ao7.html
[11142004]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: U/V CROSS-BAND REPEATER
Digipeater: Inactive

The current Expedition 12 crew is:
Commander: William McArthur - KC5ACR
Flight Engineer: Valery Tokarev - (no call)

Worldwide packet uplink: 145.990 MHz FM
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM
Doppler Shift is 10 KHz

Russian callsigns: RS0ISS, RZ3DZR
USA callsign: NA1SS
Packet station mailbox callsign: RS0ISS-11
Packet station keyboard callsign: RS0ISS-3
Digipeater callsign: ARISS

The ISS daily crew schedule can be found at:
http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.

More information is available at:
http://www.rac.ca/ariss
http://spaceflight.nasa.gov/station/reference/radio/
http://www.marexmg.org/fileshtml/unprotopage.html
http://www.issfanclub.com
http://oscar.dcarr.org/
[10162005]
NNNN
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SB SAT @ AMSAT <KB9MMC $ANS-296.S2
WSR 296 Part 2 10/23/2005

AMSAT NEWS SERVICE BULLETIN 296.S2 FROM AMSAT HQ
SILVER SPRING, MD, OCTOBER 23, 2005
TO ALL RADIO AMATEURS
BID: $ANS-296.S2

PCSAT2 ?0-??
Catalog Number:
Launch Date: August 1, 2005

Status: Operational

PCSAT2 was installed on the exterior of the International Space
Station and was activated on August 3, 2005.

PCSAT2 CAPABILITIES: PCSAT2 is attached to the ISS and so its operations
must be in cooperation with the ARISS communications suite to minimize
any mutual interference and to coordinate activities. Here are the
capabilities of the PCSAT2 and ARISS payloads:

PCSAT SYSTEM A:

435.275 PCSAT2 DOWNLINK 1200 baud packet with uplink on 145.825
435.275 PCSAT2 DOWNLINK Occasional user PSK-31 continuous downlink
145.825 PCSAT2 DOWNLINK 1200 baud packet

PCSAT SYSTEM B:

437.975 PCSAT2 DOWNLINK periodic Solar Cell data and PCSAT2 telemetry at
9600 baud
437.975 PCSAT2 DOWNLINK TNC-B command downlink at 1200 baud
437.975 PCSAT2 DOWNLINK User Voice Repeater with VHF uplink
437.975 PCSAT2 DOWNLINK Packet digipeater with VHF uplink

It looks like PCSAT2 can best contribute at this time by operating in
PSK-31 mode for the near future. This is a very exciting new
transponder mode which solves the congestion problem on FM repeaters
by letting multiple stations all communicate at the same time.

PSK-31 users are welcome to try out the new PCSAT2 PSK-31 transponder
on ISS with an uplink on 29.402 +/- 1 KHz and downlink on 435.275 +/-
Doppler using FM.

The FM downlink lets everyone operate full duplex and everyone to see
the same view of the passband as everyone else. THus you can see
exactly
what your signal looks like to everyone else.

Help Wanted:

Here is your chance to become a viable part of the Amateur
Satellite Community.

We are looking for a volunteer satellite packet
station in Hawaii that is interested in helping with
telemetry and sat-gating of PCSAT2 and
ARISS packets. Requirements are:

1) General familiarity with packet
2) TNC connected to a cross band radio that
can RX on UHF and TX on VHF.
3) modest UHF beam and rotator system.

Contact WB4APR for more information.

Packets seen from PCSAT2 can be reviewed at:
http://www.findu.com/cgi-bin/pcsat2.cgi

A screen shot of both the 9600 bps and 1200 bps decoded data
as seen by Simon, 9W2QC, can be seen at:
http://www.9w2qc.net/pcsat2/

More information on PCSAT2 can be found at:
http://web.usna.navy.mil/~bruninga/pcsat2.html

[ANS-WSR thanks Bob, WB4APR and the U.S. Naval Academy Satellite Lab for
the aboveinformation.]

[08282005}
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - ON
FM REPEATER - V/U HIGH POWER

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
Analog voice uplink: 145.880 MHz FM
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

[ANS-WSR thanks Mike Kingery, KE4AZN for the above information]
[09252005]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Non-Operational?????

Uplink/downlink: 145.827 MHz 1200 baud AX.25 AFSK via W3ADO-1
Aux/Uplink: 435.250 MHz 9600 baud via PCSAT-2 (off)
APRS Downlink: 144.390 MHz (Region 2)

PCSat is a 1200-baud APRS digipeater designed for use by stations using hand-held or mobile transceivers. Downlinks feed a central web site at: http://pcsat.aprs.org

The APRS-equipped PCSat was built by midshipmen from the U.S. Naval Academy under the guidance of Bob Bruninga, WB4APR.
[07242005]
=====
CUTE-1
Catalog number: 27844
Launched: June 30,2003

Status: Operational

Uplink: ?
Downlink: 436.8375 CW
437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)
Cliff, K7RR reports:
In the latest Weekly Satellite Report, CUTE 1, #27844 is listed as OPERATIONAL?
Indeed it is very operational as a CUBESAT sending CW telemetry on 436.8345 MHz. At the July 7 2005, 23:45:20 pass over the Western USA:
CUTE 1 6B A4 xx 7F D7 66A8 4702 FF FF7C 65
CUTE 1 6C A6 59 80 D9 66A8 4702 FF FE7C B6

The June 30th KEPS were within ten seconds of AOS and LOS. It is an very good object to practice tracking as the orbit and transmitter power are similar to proposed CUBESATS awaiting launch this December. As a check for Doppler correction, the lack of change in tone is an excellent indicator.

CUTE 1 is a Japanese (Tokyo Institute of Technology) one kilogram nanosatellite that was launched by a Rokot rocket from Plesetsk at 14:15 UT on 30 June 2003. It carries a 100 mW beacon at 436.8375 MHz. Initial orbital parameters were period 101.4 min, apogee 831 km, perigee 819 km, and inclination 98.7?.

For further info about CUTE-1 goto:
http://lss.mes.titech.ac.jp/ssp/cubesat/operation/Schedule_e.html

[ANS WSR wishes to thank Cliff, K7RR, for this week's information]
[07242005]
=====
GO-32 TECHSAT-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
(435.325 n/a - temperature problems)
Uplinks: 145.850, 145.890, 145.930 FM
1269.700, 1269.800, 1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[03132005]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink: 145.850 or 145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz
Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[05152005]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for
APRS users.

Uplink: 145.90 145.92 145.94 145.96 MHz FM
(using 1200-baud Manchester FSK)
Downlink: 437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon: 2401.1428 MHz
Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

A WOD collection of current graphics along with general information
and telemetry samples can be found at:
http://www.telecable.es/personales/ea1bcu
[05092004]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational?

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK).
approx. 10 days ON, 10 days OFF
Mode-S Beacon: 2401.500 MHz. ... OFF
UHFBeacon: 435.025 MHz. ... OFF

OSCAR-11 is back! I received the good news, on Saturday morning, while at the AMSAT-UK Colloquium. This was entirely unexpected! On Sunday morning Bob G4VRC played me a recording of an early morning pass received that day.

During the period 21 July to 14 August 2005 consistent signals have been heard from 30 July to 08 August. Signals seem to be weaker than usual, confirmed by the many reports received. However,since I last heard the satellite on 30 April, I've reinstalled my antennas , which makes comparisons difficult.

Many thanks for all the recent reports of OSCAR-11 including those from KU7Z (who heard it first), KB2M, VK6XH, HK7MKE, KA2UPW, JE9PEL, G1OCN, HB9SKA and G8OQW.

All the analogue telemetry channels, 0 to 59 are zero, ie they have failed. The status channels 60 to 67 are still working. One bit in channel 62, DSR mode, has changed from WRITE to READ. DSR is the Digital Store & Readout experiment. This could be significant if the experiment is still drawing current, but the other status bit indicates that it is switched OFF.

The on-board clock is now showing a very large error. It has lost approximately 19 days since 30 April. During the recent data collection period, the clock error has been changing at a decreasing rate. The size of the clock error and the rate at which it is changing is similar to the duration of the solar eclipse periods. This suggests that the clock might have been switching OFF during eclipses.

The eclipses have now ended, and the satellite should be in continuous sunlight for the remainder of this year, and well into next year. This should help the satellite to continue transmitting, although continuous sunlight can cause problems due to excessive temperatures.

If the watchdog timer is still operating on a 20 day cycle, ie. approximately ten days ON followed by 10 days OFF, then the VHF beacon should resume transmissions around 18 August.

The Beacon frequencies are -

VHF 145.826 MHz. AFSK FM ASCII Telemetry

UHF 435.025 MHz. OFF

S-band 2401.5 MHz. OFF

Listeners to OSCAR-11 may be interested in visiting my website which contains an archive of news & telemetry data. It also contains details

about using a soundcard or hardware demodulators for data capture.
There is software for capturing data, and decoding ASCII telemetry. The
URL is www.users.zetnet.co.uk/clivew/

If you place this bulletin on a terrestrial packet network, please use
the bulletin identifier $BID:U2RPT112.CWV, to prevent duplication.

[ANS-WSR thanks Clive, G3CWV, for the above information]

More information on UO-11 OSCAR-11 can be found at:
http://www.users.zetnet.co.uk/clivew/

MPEG3 files can be found here at Mineo, JE9PEL website:
http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm

[08212005]
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SB SAT @ AMSAT <KB9MMC $ANS-296.S3
WSR 296 Part 3 10/23/2005

AMSAT NEWS SERVICE BULLETIN 296.S3 FROM AMSAT HQ
SILVER SPRING, MD, OCTOBER 23, 2005
TO ALL RADIO AMATEURS
BID: $ANS-296.S3

THE FOLLOWING ARE IN ORBIT BUT ARE
NON-OPERATIONAL AT THIS TIME:

POSAT-1 PO-28
Catalog Number: 22829
Launched : September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 435.250 MHz
435.275 MHz

Uplink: 145.925 MHz
145.975 MHz

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

PO-28 (POSAT-1), Portugal's first satellite, launched 12 years ago,
will be turned over to Amateur Radio use in the very near future. That
was the word July 30 from AMSAT-UK Secretary Jim Heck, G3WGM, during the
AMSAT-UK International Space Colloquium in Guildford, England.

Launched September 25, 1993, the satellite operated as a packet store-
and-forward BBS (9600 baud FM FSK) on Amateur Radio frequencies for
several weeks in early 1994. Over the years, PO-28's primary usage has been
commercial, although plans have called for eventually shifting its operation
to ham radio use. G3WGM reports that following lengthy negotiations it has

been agreed that the satellite can be switched permanently to amateur frequencies. The changeover is expected to take a couple of weeks.

The Portuguese satellite was built at the University of Surrey as part of a collaborative satellite technology program that involved industry and academe. Uplink frequencies will be 145.925 and 145.975 MHz. Downlink frequencies will be 435.250 and 435.275 MHz. More information on PO-28 is on the AMSAT Web site http://www.amsat.org/amsat/sats/n7hpr/po28.html.

Uplink Frequencies: 145.925 and 145.975 MHz
Downlink Frequencies: 435.250 and 435.275 MHz

Orbit: 822 x 800 km, 98.6 deg inclined, sun-synchronous.

Transponder capabilities include FM repeater and 38k4 data. If you want to hear how loud this satellite is, listen on 429.950 until the change back to amateur radio service.

Keplerian elements for PO-28 are not currently contained in the AMSAT keps bulletins, but can be found at Celestrak in amateur.txt using the name "POSAT". Users of Space Track should query the NORAD Satellite ID number 22829. The name listed by Space Track is "EYESAT A".

More information of POSAT-1 can be found at:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
http://www.amsat.org/amsat/sats/n7hpr/po28.html
[ANS-WSR wishes to thanks Trevor, M5AKA and Jim, G3WGM, for this week's information.]
[08072005]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon: 145.810 MHz (unmodulated carrier)

AO-10 has been locked into a Mode-B, 70-cm uplink and 2-meter downlink for several years.

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Non-operational

Uplink: 145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink: 435.812 MHz SSB
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Alberto E. Zagni - I2KBD reports on 02/13/05
The spacecraft is in MBL (safe mode) and is trasmitting just 6 channels
of telemetry. Temperatures and voltage are nominal, but there seems to
be a problem with the onboard receiver, refusing to accept commands.
The spacecraft was launched in 1993, thus nearing 12 years in orbit...

Best regards
Alberto E. Zagni - I2KBD
ITAMSAT Mission Director

More information of IO-26 can be found at:

http://joshua.micronet.it/english/itamsat/itamsathome.html
http://www.amsat.org/amsat/sats/n7hpr/io26.html
www.itamsat.org

[02132005]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon: 29.408 MHz
Robot: 29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB
Beacon: 145.860 MHz
Robot: 145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM

[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB
Beacon: 29.352 MHz (intermittent)
SSB meeting frequency: 29.380 MHz (unofficial)

John, KD6PAG reports on June 16, 2004 to ANS:
RS-15 beacon seemed to be back in the mode where it's a tone about 5
seconds off and then 5 seconds on this morning.

ANS is looking for more confirmations of RS-15 coming back.

[ANS thanks John, KD6PAG for RS-15 information]
[06202004]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplink: 145.84 145.86 145.88 145.90 MHz FM
(using 1200-baud Manchester FSK)
CW downlink: 437.125 MHz
Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)
Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]
=====
FO-20 JAS-1b
Catalog number: 20480

Launch Date: February 07, 1990

Status: Non-Operational

Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM
Broadcast Callsign: HLO1-11
BBS: HLO1-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a
non-operational status.
[05092004]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM (9600-baud FSK)
Downlink: 436.500 MHz FM
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink frequency (listed on the PanSat web site) 436.500 MHz

The satellite is not available for general uplink transmissions.

The Naval Postgraduate School developed PanSat. At the time of
launch, PanSat spread-spectrum digital transponders were to
be available to Amateur Radio operators along with software to utilize
this technology.

The satellite is still operating, however, the spread spectrum packet
radio portion never took place. The spacecraft is now beyond it's
initial 2-year mission life, but telemetry records are still being
downloaded.

For more information, visit the official PanSat web site at:
http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS has no further information]
[05232004]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlink: 437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA
web site at the following URL:

ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplink V-band 145.840 - 145.990 MHz CW/LSB
U-band 435.550 - 435.800 MHz CW/LSB
L1-band 1269.250 - 1269.500 MHz CW/LSB
L2-band 1268.325 - 1268.575 MHz CW/LSB
S1-band 2400.350 - 2400.600 MHz CW/LSB
Downlink: S2-band 2401.225 - 2401.475 MHz CW/USB
K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon: 2401.323, 24,048.035
[05232004]

SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational
Downlink: 437.075 MHz
Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz
Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
callsign KE6QMD, as per the user service agreement located at the
following
URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Semi-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

AO-49 (SAFIR-M) is a German amateur radio payload onboard the small
German
scientific satellite "RUBIN-2".

AO-49 was built by the German amateur radio association "AATiS
e.V." (German acronym for "Arbeitskreis Amateurfunk und Telekommunikation
in der Schule", which means: 'working group for amateur radio anand
telecommunications in schools'). AO-49 is designed as a "store and
broadcast" system for APRS based messages, dedicated for the use of
schools in combination with the existing WX-Net and planned buoy
experiments in Germany.

No transmissions detected since the 1st of February 2003! It appears
AO-49 is not properly aligned to illuminate the solar panels. This
should end soon. Due to its orbit, AO-49 will be in a phase without
eclipses until 13Feb03.

Martin DG8UAU has written a small software program "SAFIR-M Decoder" to
allow decoding of the received DATA0 frames. It is available at:
http://amend.gmxhome.de in the section Aktuelles.

Details on AO-49 (SAFIR-M) can be found at:
http://amend.gmxhome.de

Information about AATiS e.V. is available at:
http://www.aatis.de
[05092004]
NNNN
/EX

SB SAT @ AMSAT <KB9MMC $ANS-296.S4
WSR 296 Part 4 10/23/2005

AMSAT NEWS SERVICE BULLETIN 296.S4 FROM AMSAT HQ
SILVER SPRING, MD, OCTOBER 23,2005
TO ALL RADIO AMATEURS
BID: $ANS-296.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE
PROPOSED FOR LAUNCH AT THIS TIME:

UCISAT ?O-??
Catalog number:
Proposed Launch Date: October 31, 2005

Status: Under Construction

Downlink: Submission in Progress
Uplink: Submission in Progress
Callsign: Submission in Progress

This from Matt Bennett, KF6RTB, UCISAT Communications Team Member:

Our website is www.ucisat.net .This is a new website, however, and
doesn't have the "Status" section active yet. Because of the growing
interest in our project, I'll push our webmaster to create updates
(hopefully) on a week-to-week basis. For now, the current status of
the mission is as follows:

-Expected Launch Date: October 31st, 2005
-Frequency Allocation: Submission in Progress
-Construction Status: Sub-Assembly
[WSR to thank Matt Bennett, KF6RTB, for this week's report.]
[01302005]
=====
SSETI ?O-??
Catalog Number:
Proposed Launch Date: October 27, 2005

Status: AWAITING LAUNCH

Graham, G3VZV reports:

The SSETI Express satellite is still scheduled to launch at 06:52
UTC on Thursday, October 27 on board a Kosmos 3M launcher.

The launch team arrived in Moscow and next completed an 18 hour
journey by train to Plesetsk. The ISC (integrated system check)
was completed satisfactorily within a couple of hours of powering
up. All the systems are OK. The propulsion tank had maintained the
required 300 bar pressure. Both UHF and S band radios were also
tested - including the transponder and DTMF telemetry configurations.

Final battery charging was performed over the weekend. SSETI Express
will be joined with the other four satellites on the launch adaptor on
Monday, October 24. The launch adaptor will itself then be integrated
onto the rocket.

Roll out of the complete launch vehicle at the launch complex (approx
40 kilometres away from the assembly facility) is scheduled for very
early on Wednesday morning and its erection to the vertical position
will take place around midday. The launch team will then pack up all
the test gear and other equipment for its return to ESA ESTEC's facility
in the Netherlands to await the launch to take place the following day!

A daily report of the launch campaign is being maintained at
http://sseti.gte.tuwien.ac.at/express/mop/index.php?uri=news.html
This mission operations site is completely up-to-date regarding Kepler
TLEs and other LEOP "Launch and Early Operations Phase" details.

The SERACC software, needed to decode and submit the received data
to the SSETI database, together with some audio files containing recorded
9k6 signals to experiment with is planned for release prior to launch.

There will be two SSETI Express competitions for radio amateurs.
First is the unique "I heard it first" T shirt award; second is
the prize for amateur who submits the largest amount of valid telemetry
and payload data to the SSETI Express database before 1st February 2006.
The telemetry prize, sponsored by ESA, is rather more valuable than just
a T shirt - see the full details at:
http://sseti.gte.tuwien.ac.at/express/mop/index.php?uri=ham_contest.html

Full details of these events will be available on the Express mission
website. This includes full information about the satellite, the ESA
sponsored competition,and the plans for its use in the amateur
satellite service. See:
http://sseti.gte.tuwien.ac.at/express/mop/

The ESA website about SSETI Express is at:
http://www.esa.int/SPECIALS/sseti_express/SEMARJ7X9DE_0.html

The latest version of the SSETI Express handbook can be downloaded
free of charge from the AMSAT-UK website at:
http://www.uk.amsat.org/

A live webstream of the ESA produced TV coverage of the launch is
going to be provided by Howard G6LVB at:
http://www.streamingwizard.com/clients/space.asx

The programming on the web stream is expected to commence at
approximately 06:00 UTC on launch day.

[ANS thanks Graham, UA/G3VZV for the above information]

More SSETI Links at:

SpaceDaily has a report about SSETI at:
http://www.spacedaily.com/news/internet-04zzzu.html

You can find more info about SSETI at:
http://sseti.gte.tuwien.ac.at/WSW4/

Latest news about SSETI can be found at:
http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php

Look at the website for the SSETI Express webcam
http://sseti.gte.tuwien.ac.at/WSW4/webcam.htm

[10232005]
=====
PHASE 3E ?O-??
Catalog Number:
Proposed Launch Date: Early 2006

Status: Under Construction

For the latest project status update please visit the AMSAT-DL
P3-E web page:
http://www.amsat-dl.org/p3e/

[ANS-WSR wishes to thank William Leijenaar, PE1RAH for this week's
report]
[10022005]
=====
CP1 ?o-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N6CP
Proposed Transmit Frequency: 436.845
[03272005]
=====
CP2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.325
[03272005]
=====
HAUSAT1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: D90HP
Proposed Transmit Frequency: 437.465
[03272005]
=====
ICE Cube 1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: W2CXM
Proposed Transmit Frequency: 437.305
[03272005]
=====

ICE Cube 2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N2VR
Proposed Transmit Frequency: 437.425
[03272005]
=====
ION ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.505
[03272005]
=====
KUTEsat ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: KC0RMW
Proposed Transmit Frequency: 437.385
[03272005]
=====
MEROPE ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: K7MSU-1
Proposed Transmit Frequency: 145.980
[03272005]
=====
nCUBE1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
2407.25
[03272005]
=====
RINCON ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
437.345
[03272005]
=====
SACRED ?O-??
Catalog Number:

Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SEEDS ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: JQ1YGU
Proposed Transmit Frequency: 437.485
[03272005]
=====
Mea Huaka ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.405
[03272005]
=====
SUITSAT ?O-??
Catalog Number:
Proposed Release Date: December 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: TBA

A video of the progress of Suitsat can be found at the following URL:
http://www.amsat.org/amsat-new/information/videoNews.php

To be released from an airlock of the International Space Station some
time
in December of 2005.
[10022005]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satelite Report Editor is James K. Darrow, KB9MMC.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

400. SETI Express/Cube Sats Launch/Info

Newsgroup: rec.radio.amateur.space
Date: 2005-10-26 14:20:56 UTC
From: William Erhardt <erhardt@mt.net>
Message-ID: <kKSdnVUeVf9UDcLeRVn-tw@mt.net>
Source record: 1864

SSETI Launch Offers Exciting Listening Opportunities
The SSETI Express satellite is scheduled to launch at 06:52 UTC on Thursday, October 27 on board a Kosmos 3M launcher. Shortly after launch amateur radio operators around the world will have an exciting opportunity to begin receiving signals from four new satellites.

This is a quick listening guide to the frequencies expected to be used. The latest version of the SSETI Express handbook, which can be downloaded free of charge from the AMSAT-UK website contains full operational details. Visit http://www.uk.amsat.org/ to download your own copy.

Commencing at approximately 06:00 UTC on launch day, a live webstream of the ESA produced TV coverage of the launch is going to be provided by Howard G6LVB at:
http://www.streamingwizard.com/clients/space.asx

SSETI Express will coast for 74 minutes after orbital injection to ensure a good separation between SSETI Express and the other passengers and will then automatically deploy three Cubesats.

SSETI Express will have two main downlinks:
437.250 MHz @ 3 watts for 9600 baud FSK packets
2401.835 MHz @ 0.7 - 1.5 watts for 38400 bps FSK packets

The 2.4GHz-downlink transmitter will be mainly used to transmit picture data at rate of 38k4. However, it will be switched over to single channel FM U/S voice transponder operation occasionally as part of the payload cycle.

Here is a summary of the three Cubesats providing radio amateurs worldwide opportunities to hear the new spacecraft ...

Ncube-2

The Norwegian student satellite, Ncube-2 is an experimental spacecraft that was developed and built by students from four Norwegian universities. Data transmissions and digipeater use 1200 and 9600 bps.

Downlink 437.305 @ 1.5 watts. The first transmissions will be 20 minutes after separation from SSETI Express. The message: "DE LA1CUB NCUBE2 FF LA1CUB" will be sent in morse at 26 words per minute using a 2400Hz tone.

At the end of the message an unnumbered AX.25 packet is sent containing the string: DE LA1CUB NCUBE2 NORWEGIAN CUBESAT - WWW.NCUBE.NO . The AX.25 header will include Callsign: NCUBE, and Destination: EARTH.

UWE-1

The UWE-1 spacecraft is a registered Pico-satellite of Julius Maximilians Universitaet Wuerzburg, Germany. Its research aim is to test IP based telecommunications protocols in space.

Downlink 437.505 @ 1.0 watts. The communication protocol is AX25. The satellite will transmit for about 1 sec every 1 minute.

XI-V

The XI-V satellite is a Pico-satellite of the University of Tokyo, Intelligent Space Systems Laboratory.

Downlink (telemetry) 437.345 @ 0.8 watts sending AFSK AX.25, 1200bps
Downlink (beacon) 436.465 @ 0.08 watts CW repeating every 30 seconds

The homepage for SSETI Express is at:
http://sseti.gte.tuwien.ac.at/express/mop/

The SERACC software, needed by radio amateurs to decode the telemetry and payload data from SSETI and to submit it to the main SSETI Express central database is available for download at:
http://sseti.gte.tuwien.ac.at/express/mop/index.php?uri=downloads.html

Updated: 25 Oct, 05

401. Ham Polling Station

Newsgroup: rec.radio.amateur.space
Date: 2005-11-02 02:05:35 UTC
From: Charles Brabham <n5pvl@sbcglobal.net>
Message-ID: <L9V9f.8796$7h7.2914@newssvr21.news.prodigy.com>
Source record: 1865

HamPoll is here in order to give amateurs a chance to speak for themselves, and in time to provide reasonably accurate and significant polling data on a variety of issues related to the amateur radio service.

You are welcome to browse the polling data we have, but we especially encourage US amateurs visiting here to register with thier callsign and vote in the HamPoll Polling Station.

Whether you come to browse, to discuss or submit new polls, or to tender your vote, be sure to visit regularly as new polls are included from time to time, and the poll data changes as more hams participate day to day.

Stop by at: http://www.hampoll.com

402. ANS-303 AMSAT News Service Weekly Bulletin

Newsgroup: rec.radio.amateur.space
Date: 2005-11-03 14:19:02 UTC
From: JoAnne Maenpaa <wb9jej_no-spam@earthlink.net>
Message-ID: <q%oaf.4331$m81.638@newsread1.news.atl.earthlink.net>
Source record: 1866

AMSAT NEWS SERVICE
ANS-303

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* SSETI Express Launched 30 September 2005
* Urgent Reguest for UWE-1 Data
* New Eagle Project Information
* OSCAR 11 Report - 25 October 2005
* AMSAT Awards
* ARISS Status - 24 October 2005

SB SAT @ AMSAT $ANS-303.01
SSETI Express Launched 30 September 2005

AMSAT News Service Bulletin 303.01
From AMSAT HQ SILVER SPRING, MD.
October 30, 2005
To All RADIO AMATEURS
BID: $ANS-303.01

The SSETI Express satellite launched at 06:52 UTC on Thursday, 27 October 2005 on board a Kosmos 3M launcher. One hundred and three minutes later, exactly on schedule, the first signals were heard form the groundstation in Aalborg, and two-way communication was established. In addition to several successful communication sessions with SSETI Express, two of the Cubesat passengers, UWE-1 and Xi-V, have been heard by their groundstations.

An official release from ESA stated, "22:20 CEST SSETI Express went into a safe mode due to an undervoltage caused by battery charging problems. The operations team is working actively to resume nominal operations of the satellite and is receiving tremendous help in the process from the amateur radio community. At the time of the anomaly many mission milestones had already successfully
been met."

Graham, UA/G3VZV reports, "that it seems that no reliable reports of any signals have been received and the teams are reviewing all the telemetry already received to fully understand what is happening on board.Initial review suggests that there is a significant chance that the power supply problem may correct itself." Graham also advises that the command station in Aalborg is planning to try to try a blind command of the satellite into S band on mode - maybe on a Sunday am pass at 10:30 UTC.

As the statement above makes clear, ESA and the SSETI Association greatly value the input that amateur operators are providing and would ask amateurs around the world to continue to check for signals on 437.250MHz at the appropriate pass times. These signals may be short bursts of 9k6 data every 18 secs or bursts of pulse telemetry every 30 secs. Please understand that the pulse beacon decoder can produce spurious results on plain noise if over driven!

Anyone hearing anything that matches the above detail is requested to please email details to missioncontrol@sseti.org

The type of the first transmissions will depend on the state of the battery.

In Nominal mode - a sub 1 second burst of AX25 9k6 FSK telemetry every 18 seconds on the downlink frequency of 437.250 MHz.

In Recovery or Safe mode - simple on/off telemetry comprising 16 x 100 msec carrier pulses. This telemetry is repeated every 30 seconds in Safe Mode and every 2 minutes when in Recovery Mode.

The satellite will transmit at a power of 3 watts.

A daily report of the launch campaign is being maintained at http://sseti.gte.tuwien.ac.at/express/mop/index.php?uri=news.html This mission operations site is completely up-to-date regarding Kepler TLEs and other LEOP "Launch and Early Operations Phase" details.

The SERACC software, needed to decode and submit the received data to the SSETI database, together with some audio files containing recorded 9k6 signals to experiment with is also now available

The ESA website about SSETI Express is at:
http://www.esa.int/SPECIALS/sseti_express/SEMARJ7X9DE_0.html

The latest version of the SSETI Express handbook can be downloaded free of charge from the AMSAT-UK website at:
http://www.uk.amsat.org/

[ANS thanks Graham, UA/G3VZV and Trevor, M5AKA for the above information]

/EX

SB SAT @ AMSAT $ANS-303.02
Urgent Reguest for UWE-1 Data

AMSAT News Service Bulletin 303.02
From AMSAT HQ SILVER SPRING, MD.
October 30, 2005
To All RADIO AMATEURS
BID: $ANS-303.02

Radu, with the UWE-1 Team in Wuerzburg, Germany reports that they have a very serious situation and need immeadiate assistance copying UWE-1 telemetry data. Due to the extremely unfavorable weather conditions in Wuerzburg (heavy clouds and very thick fog, with visibility sometimes less than 10 m), we were not able to decode much of the sensor data from UWE-1 during the last two passes over our ground station. We have already prepared a list with new equipment we need for the GS, but it might take a while to get it, as 0 1 November 2005 is a national bank holiday in Germany.

The command station is able to send commands to the satellite and can receive the answers, but the signals received were S2-S3 level on the S-meter. The last reliable data is already 30 hours old. They urgently need some beacon data in order to characterize the status of the subsystems and decide how to continue the mission.

UWE-1 is sending one beacon every 60[sec] on 437.505+- MHz, 1200baud AFSK. One beacon is 33 bytes long. The UWE-1 team would be very happy to receive also raw (.hex) data, we can decode them here. Please send the data to: cubesat@informatik.uni-wuerzburg.de. Thank you very much!

Please forward this email to everyone able to help us with some new data.

Thank you very much for your support!

[ANS thanks Radu for the above information]

/EX

SB SAT @ AMSAT $ANS-303.03
New Eagle Project Information

AMSAT News Service Bulletin 303.03
From AMSAT HQ SILVER SPRING, MD.
October 30, 2005
To All RADIO AMATEURS
BID: $ANS-303.03

New and updated information about the Eagle HEO satellite project is now available at
http://www.amsat.org/amsat-new/eagle/

The new information is about the IHU-3 (Internal Housekeeping Unit - Version 3) which is the brains behind Eagle and is an open source, open design component. The IHU-3 link contains the source code archives and documentation for projects and developers incorporating the IHU-3 into their system designs.

There is also a link to the Can-Do website operated by Steve Moraco, KC0FTQ which contains reference documents, firmware updates, programming libraries, schedules and milestones for all aspects of the Can-Do bus, modules, widgets and other components. The Can-Do is the interconnection bus that connects all Eagle modeules to the IHU.

[ANS thanks Lee KU4OS for the above information]

/EX

SB SAT @ AMSAT $ANS-303.04
OSCAR 11 Report - 25 October 2005

AMSAT News Service Bulletin 303.04
From AMSAT HQ SILVER SPRING, MD.
October 30, 2005
To All RADIO AMATEURS
BID: $ANS-303.04

During the period 24 September to 25 October 2005 the VHF beacon on 145.826MHz resumed transmissions, as expected, on 30 September, sometime between 06:05 and 06:42 UTC passes. Reasonable signals were also captured on the 17:44 pass, later that day. However by the 16:49 UTC pass on 02 October, the beacon had switched OFF. Transmissions resumed on 21 October, and should continue until around 31 October.

The on-board clock continues to show a very large error. Currently it is 19.2394 days slow, having lost six hours while the beacon was last OFF, ie. between 02 October and 21 October. When the beacon is ON, the clock is stable to within a few seconds.

All the analogue telemetry channels, 0 to 59 are zero, ie they have failed. The status channels 60 to 67 are still working.

The eclipses have now ended, and the satellite should be in continuous sunlight for the remainder of this year, and well into next year. This should help the satellite to continue transmitting, although continuous sunlight can cause problems due to excessive temperatures.

The watchdog timer appears to be operating on the 20 day cycle, ie. approximately ten days ON followed by 10 days OFF. It appears to be uneffected by problems of the on-board clock. However, poor solar attitude, and battery problems, may be combining to produce a low line voltage. This causes the beacon to switch OFF premeaturely, and resets the watchdog timer cycle.

The Beacon frequencies are -
VHF 145.826 MHz. AFSK FM ASCII Telemetry
UHF 435.025 MHz. OFF
S-band 2401.5 MHz. OFF

Listeners to OSCAR-11 may be interested in visiting my website which contains an archive of news & telemetry data. It also contains details about using a soundcard or hardware demodulators for data capture. There is software for capturing data, and decoding ASCII telemetry. The

URL is
www.users.zetnet.co.uk/clivew/

If you place this bulletin on a terrestrial packet network, please use
the bulletin identifier $BID:U2RPT114.CWV, to prevent duplication.

[ANS thanks Clive G3CWV for the above information]

/EX

SB SAT @ AMSAT $ANS-303.05
AMSAT Awards

AMSAT News Service Bulletin 303.05
From AMSAT HQ SILVER SPRING, MD.
October 30, 2005
To All RADIO AMATEURS
BID: $ANS-303.05

This week, congratulations go out to all of the following.

Allen Kenny, KK4EMK, Satellite Communicators Club
Robert Tucker, WA6MBL, Satellite Communicators Club

Allen Kenny, KK4EMK, Satellite Communication Achievement Award #423
Marc Sanchez, KD5MSS, Satellite Communication Achievement Award #424

Allen Kenny, KK4EMK, 51 on 51 Award #38

Marc Sanchez, KD5MSS, South Africa Communication Achievement Award

To see all the awards visit http://www.amsat.org or
http://www.amsatnet.com

[ANS thanks Bruce KK5DO, for the above information]

/EX

SB SAT @ AMSAT $ANS-303.06
ARISS Status - 24 October 2005

AMSAT News Service Bulletin 303.06
From AMSAT HQ SILVER SPRING, MD.
October 30, 2005
To All RADIO AMATEURS
BID: $ANS-303.06

1. Upcoming School Contacts

Kawachi Citizen's Committee for Youth in Miyoshi, Hiroshima, Japan has
been approved for a contact on Thursday, 03 November 2005 at 0744 UTC.

2. ARRL Article on JOTA 2005

Over the weekend of 15-16 October, astronaut Bill McArthur, KC5ACR,
participated in the 2005 Jamboree on the Air (JOTA). Since then, Bill

has been active on voice, and has continued to thrill hams worldwide. ARRL covered the JOTA event in a web story entitled, "ISS Astronaut Gets in the JOTA Spirit." See: http://www.arrl.org/news/stories/2005/10/21/4/?nc=1

3. Astronaut Training

Astronauts Nicole Stott and Garrett Reisman attended their first amateur radio license training session on 18 October. They were scheduled for their second session on Wednesday, 26 October 26. On 17 October 17, Bob Behnken took and passed his amateur radio exam. He received his callsign, KE5GGX, and is currently in the selection pool for future ISS expedition crews. Congratulations Bob!

4.Expedition 11 Crew Debrief

The U.S. debrief session with Expedition 11 crew member John Phillips, KE5DRY, is tentatively scheduled for Tuesday, 08 November at 2100 UTC.

5. WebTech.com Article on ARISS

ARISS delegate Rosalie White sat for an interview with Web-Tech.com to discuss the ARISS program. The online story is available on their website. See: http://www.personaltechpipeline.com/showArticle.jhtml?articleID=171204199

6. School Selection Committee Meeting Held

Rosalie White held a School Selection Committee teleconference on 13 October 2005. Discussions included the NEEIS database, which will reopen in mid-October for teachers to finish entering their evaluations, and the possibility of Bill McArthur participating in two ARISS contacts per week, which could reduce the backlog of U.S. schools waiting for a contact. Meeting minutes will be posted on the ARISS website in the near future. The next committee meeting is scheduled for 08 December 2005.

7. Space.com Article on Olsen

Space.com wrote an article covering Greg Olsen's flight to the ISS. The story mentions his ARISS contacts with school children and the importance of sharing his flight with others to excite their imaginations. See: http://space.com/missionlaunches/051017_olsen_us.html

8. ARISS - Eindhoven Contact

Dutch astronaut Andre Kuipers, PI9ISS, flew to the ISS with Expedition 9 crew members in conjunction with the Dutch Expedition for Life science, Technology and Atmospheric research (DELTA) Mission. On April 25, 2004, Kuipers participated in an ARISS contact with students from three schools: Saltoschool Hanevoet (primary school), Sint Joriscollege (secondary school) and Technische Universiteit Eindhoven (university). The students who were selected for the contact gathered in the radio

room of the Amateur Radio Club of the Technical University of Eindhoven (PI4TUE), the Netherlands. The contact was a success. A short article on the contact has recently been made available to the ARISS team, complete with photos and links to audio and video. See: http://home.vianetworks.nl/users/hamoen/pa3guo/ariss_contact.html

[ANS thanks Carol, KB3LKI for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS
ku4os at amsat dot org

403. WSR-303 AMSAT Weekly Satellite Report

Newsgroup: rec.radio.amateur.space
Date: 2005-11-03 14:19:57 UTC
From: JoAnne Maenpaa <wb9jej_no-spam@earthlink.net>
Message-ID: <h0paf.4332$m81.1483@newsread1.news.atl.earthlink.net>
Source record: 1867

This report is organized into 4 parts.
Part 1 - operational analog amateur satellites.
Part 2 - operational digital amateur satellites.
Part 3 - non - operational satellites
Part 4 - proposed satellites

SB SAT @ AMSAT <KB9MMC $ANS-303.S1
WSR 303 Part 1 10/30/2005

AMSAT NEWS SERVICE BULLETIN 303.S1 FROM AMSAT HQ
SILVER SPRING, MD, OCTOBER 30, 2005
TO ALL RADIO AMATEURS
BID: $ANS-303.S1

VO-52 HAMSAT
Catalog Number: 28650
Launch Date: May 05,2005

Status: Testing
Current Mode: U/V

Proposed frequencies:

Indian transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacom : 145.940MHz continue carier signal

Dutch transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacon : 145.860MHz 12WPM with CW message
[07242005]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - ON
FM REPEATER - V/U

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
Analog voice uplink: 145.880 MHZ FM
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

[ANS-WSR thanks Mike Kingery, KE4AZN for the above information]
[10162005]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz (67.0 Hz PL tone) (See below for operating
procedures)
Downlink: 436.795 MHz

There have been unconfirmed reports on the amsat-bb remailer that SO-50
has shifted downlink frequency as much as 5khz up. This both from Europe.

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary)

1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm
the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT
the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window
will reset the 10 minute timer.
[09122004]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplink: 145.850 145.870 145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

John, N4QWL reports on July 16th, 2005:

Last evening I had a AOS to LOS qso with WI2W. FO-29 came up at 01:17z
here in FM07 and I found WI2W and we chatted until 01:33z. The satellite was
at 2 degrees elevation when I finally heard him start to crackle a bit. What
a great QSO! To think that I watched this bird launch back in 1996 and it
is still working so well is a real thrill. I believe I still have the
video. I might just look for it and watch it again. Boy do I love this
satellite stuff! Look for you all up there.

Please send the reception reports to lab2 'at' jarl.or.jp.
Please use the subject line: 'FO-29 reception report'.

Mineo, JE9PEL, has an FO-29 satellite telemetry analysis program that
will automatically analyze all digital telemetry from the satellite (such as
current, voltage and temperature). FO29CWTE is available at:
http://www.ne.jp/asahi/hamradio/je9pel/
[ANS-WSR wishes to thanks John, N4QWL for this week's report]
[07172005]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

The latest information on AO-27 from control operator Michael Wyrick,
N3UC (former N4USI), can be found at:
http://www.ao27.org

An AO-27 question-and-answer page is available on the AMSAT-NA web
site, with updates by Ray, W2RS. The URL is:
http://www.amsat.org/amsat/intro/ao27faq.html

[ANS-WSR thanks John, K6YK, for this week's AO-27 report]
[08292004]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Semi-operational in sunlight.
Return to active status: June 21,2002

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A
145.975 to 145.925 MHz CW/USB Mode B
Beacon: 29.502 MHz, 145.972 MHz, 435.1 MHz, 2304.1 MHz

Emily, W0EEC has created a website to allow the users of AO-7 to record
contacts, observations and use of the satellite more effectively at:
http://www.emilyshouse.com/experthams/ao7/main.php

This includes the ability to log contacts.

Tim, K3TZ has written a program to decode AO-07 telemetry.
The program can be downloaded at:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

For more AO-7 info:
http://www.amsat.org/amsat/sats/n7hpr/ao7.html
[11142004]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: U/V CROSS-BAND REPEATER
Digipeater: Inactive

The current Expedition 12 crew is:
Commander: William McArthur - KC5ACR
Flight Engineer: Valery Tokarev - (no call)

Worldwide packet uplink: 145.990 MHz FM
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM
Doppler Shift is 10 KHz

Russian callsigns: RS0ISS, RZ3DZR
USA callsign: NA1SS
Packet station mailbox callsign: RS0ISS-11
Packet station keyboard callsign: RS0ISS-3
Digipeater callsign: ARISS

The ISS daily crew schedule can be found at:
http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.

More information is available at:
http://www.rac.ca/ariss
http://spaceflight.nasa.gov/station/reference/radio/
http://www.marexmg.org/fileshtml/unprotopage.html
http://www.issfanclub.com
http://oscar.dcarr.org/
[10162005]
NNNN
/EX

SB SAT @ AMSAT <KB9MMC $ANS-303.S2
WSR 303 Part 2 10/30/2005

AMSAT NEWS SERVICE BULLETIN 303.S2 FROM AMSAT HQ
SILVER SPRING, MD, OCTOBER 30, 2005
TO ALL RADIO AMATEURS
BID: $ANS-303.S2

PCSAT2 ?0-??
Catalog Number:
Launch Date: August 1, 2005

Status: Operational

PCSAT2 was installed on the exterior of the International Space
Station and was activated on August 3, 2005.

PCSAT2 CAPABILITIES: PCSAT2 is attached to the ISS and so its operations
must be in cooperation with the ARISS communications suite to minimize
any mutual interference and to coordinate activities. Here are the
capabilities of the PCSAT2 and ARISS payloads:

PCSAT SYSTEM A:

435.275 PCSAT2 DOWNLINK 1200 baud packet with uplink on 145.825
435.275 PCSAT2 DOWNLINK Occasional user PSK-31 continuous downlink
145.825 PCSAT2 DOWNLINK 1200 baud packet

PCSAT SYSTEM B:

437.975 PCSAT2 DOWNLINK periodic Solar Cell data and PCSAT2 telemetry at
9600 baud
437.975 PCSAT2 DOWNLINK TNC-B command downlink at 1200 baud
437.975 PCSAT2 DOWNLINK User Voice Repeater with VHF uplink
437.975 PCSAT2 DOWNLINK Packet digipeater with VHF uplink

It looks like PCSAT2 can best contribute at this time by operating in
PSK-31 mode for the near future. This is a very exciting new
transponder mode which solves the congestion problem on FM repeaters
by letting multiple stations all communicate at the same time.

PSK-31 users are welcome to try out the new PCSAT2 PSK-31 transponder
on ISS with an uplink on 29.402 +/- 1 KHz and downlink on 435.275 +/-
Doppler using FM.

The FM downlink lets everyone operate full duplex and everyone to see
the same view of the passband as everyone else. THus you can see
exactly
what your signal looks like to everyone else.

Help Wanted:

Here is your chance to become a viable part of the Amateur
Satellite Community.

We are looking for a volunteer satellite packet
station in Hawaii that is interested in helping with
telemetry and sat-gating of PCSAT2 and
ARISS packets. Requirements are:

1) General familiarity with packet
2) TNC connected to a cross band radio that
can RX on UHF and TX on VHF.
3) modest UHF beam and rotator system.

Contact WB4APR for more information.

Packets seen from PCSAT2 can be reviewed at:
http://www.findu.com/cgi-bin/pcsat2.cgi

A screen shot of both the 9600 bps and 1200 bps decoded data
as seen by Simon, 9W2QC, can be seen at:
http://www.9w2qc.net/pcsat2/

More information on PCSAT2 can be found at:
http://web.usna.navy.mil/~bruninga/pcsat2.html

[ANS-WSR thanks Bob, WB4APR and the U.S. Naval Academy Satellite Lab for
the aboveinformation.]

[08282005}
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - ON
FM REPEATER - V/U HIGH POWER

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
Analog voice uplink: 145.880 MHz FM
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

[ANS-WSR thanks Mike Kingery, KE4AZN for the above information]
[09252005]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Non-Operational?????

Uplink/downlink: 145.827 MHz 1200 baud AX.25 AFSK via W3ADO-1
Aux/Uplink: 435.250 MHz 9600 baud via PCSAT-2 (off)
APRS Downlink: 144.390 MHz (Region 2)

PCSat is a 1200-baud APRS digipeater designed for use by stations using hand-held or mobile transceivers. Downlinks feed a central web site at: http://pcsat.aprs.org

The APRS-equipped PCSat was built by midshipmen from the U.S. Naval Academy under the guidance of Bob Bruninga, WB4APR.
[07242005]
=====
CUTE-1
Catalog number: 27844
Launched: June 30,2003

Status: Operational

Uplink: ?
Downlink: 436.8375 CW
437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)
Cliff, K7RR reports:
In the latest Weekly Satellite Report, CUTE 1, #27844 is listed as OPERATIONAL?
Indeed it is very operational as a CUBESAT sending CW telemetry on 436.8345 MHz. At the July 7 2005, 23:45:20 pass over the Western USA:
CUTE 1 6B A4 xx 7F D7 66A8 4702 FF FF7C 65
CUTE 1 6C A6 59 80 D9 66A8 4702 FF FE7C B6

The June 30th KEPS were within ten seconds of AOS and LOS. It is an very good object to practice tracking as the orbit and transmitter power are similar to proposed CUBESATS awaiting launch this December. As a check for Doppler correction, the lack of change in tone is an excellent indicator.

CUTE 1 is a Japanese (Tokyo Institute of Technology) one kilogram nanosatellite that was launched by a Rokot rocket from Plesetsk at 14:15 UT on 30 June 2003. It carries a 100 mW beacon at 436.8375 MHz. Initial orbital parameters were period 101.4 min, apogee 831 km, perigee 819 km, and inclination 98.7?.

For further info about CUTE-1 goto:
http://lss.mes.titech.ac.jp/ssp/cubesat/operation/Schedule_e.html

[ANS WSR wishes to thank Cliff, K7RR, for this week's information]
[07242005]
=====
GO-32 TECHSAT-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
(435.325 n/a - temperature problems)
Uplinks: 145.850, 145.890, 145.930 FM
1269.700, 1269.800, 1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[03132005]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink: 145.850 or 145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz
Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[05152005]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for
APRS users.

Uplink: 145.90 145.92 145.94 145.96 MHz FM
(using 1200-baud Manchester FSK)
Downlink: 437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon: 2401.1428 MHz
Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

A WOD collection of current graphics along with general information
and telemetry samples can be found at:
http://www.telecable.es/personales/ea1bcu
[05092004]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational?

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK).
approx. 10 days ON, 10 days OFF
Mode-S Beacon: 2401.500 MHz. ... OFF
UHFBeacon: 435.025 MHz. ... OFF

During the period 24 September to 25 October 2005 the VHF beacon on 145.826MHz resumed transmissions, as expected, on 30 September, sometime between 06:05 and 06:42 UTC passes. Reasonable signals were also captured on the 17:44 pass, later that day. However by the 16:49 UTC pass on 02 October, the beacon had switched OFF. Transmissions resumed on 21 October, and should continue until around 31 October.

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The eclipses have now ended, and the satellite should be in continuous sunlight for the remainder of this year, and well into next year. This should help the satellite to continue transmitting, although continuous sunlight can cause problems due to excessive temperatures.

The watchdog timer appears to be operating on the 20 day cycle, ie. approximately ten days ON followed by 10 days OFF. It appears to be uneffected by problems of the on-board clock. However, poor solar attitude, and battery problems, may be combining to produce a low line voltage. This causes the beacon to switch OFF premeaturely, and resets the watchdog timer cycle.

The Beacon frequencies are -
VHF 145.826 MHz. AFSK FM ASCII Telemetry
UHF 435.025 MHz. OFF
S-band 2401.5 MHz. OFF

Listeners to OSCAR-11 may be interested in visiting my website which contains an archive of news & telemetry data. It also contains details about using a soundcard or hardware demodulators for data capture. There is software for capturing data, and decoding ASCII telemetry. The URL is
www.users.zetnet.co.uk/clivew/

If you place this bulletin on a terrestrial packet network, please use the bulletin identifier $BID:U2RPT114.CWV, to prevent duplication.

[ANS thanks Clive G3CWV for the above information]

More information on UO-11 OSCAR-11 can be found at:
http://www.users.zetnet.co.uk/clivew/

MPEG3 files can be found here at Mineo, JE9PEL website:
http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm

[10302005]
NNNN
/EX

SB SAT @ AMSAT <KB9MMC $ANS-303.S3
WSR 303 Part 3 10/30/2005

AMSAT NEWS SERVICE BULLETIN 303.S3 FROM AMSAT HQ
SILVER SPRING, MD, OCTOBER 30, 2005
TO ALL RADIO AMATEURS
BID: $ANS-303.S3

THE FOLLOWING ARE IN ORBIT BUT ARE
NON-OPERATIONAL AT THIS TIME:

POSAT-1 PO-28
Catalog Number: 22829
Launched : September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 435.250 MHz
435.275 MHz

Uplink: 145.925 MHz
145.975 MHz

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

PO-28 (POSAT-1), Portugal's first satellite, launched 12 years ago,
will be turned over to Amateur Radio use in the very near future. That
was the word July 30 from AMSAT-UK Secretary Jim Heck, G3WGM, during the
AMSAT-UK International Space Colloquium in Guildford, England.

Launched September 25, 1993, the satellite operated as a packet store-
and-forward BBS (9600 baud FM FSK) on Amateur Radio frequencies for
several weeks in early 1994. Over the years, PO-28's primary usage has been
commercial, although plans have called for eventually shifting its operation
to ham radio use. G3WGM reports that following lengthy negotiations it has
been agreed that the satellite can be switched permanently to amateur
frequencies. The changeover is expected to take a couple of weeks.

The Portuguese satellite was built at the University of Surrey as part
of a collaborative satellite technology program that involved industry and
academe. Uplink frequencies will be 145.925 and 145.975 MHz. Downlink
frequencies will be 435.250 and 435.275 MHz. More information on PO-28
is on the AMSAT Web site
http://www.amsat.org/amsat/sats/n7hpr/po28.html.

Uplink Frequencies: 145.925 and 145.975 MHz
Downlink Frequencies: 435.250 and 435.275 MHz

Orbit: 822 x 800 km, 98.6 deg inclined, sun-synchronous.

Transponder capabilities include FM repeater and 38k4 data. If you want
to hear how loud this satellite is, listen on 429.950 until the change
back to amateur radio service.

Keplerian elements for PO-28 are not currently contained in the AMSAT
keps bulletins, but can be found at Celestrak in amateur.txt using the
name "POSAT". Users of Space Track should query the NORAD Satellite ID
number 22829. The name listed by Space Track is "EYESAT A".

More information of POSAT-1 can be found at:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
http://www.amsat.org/amsat/sats/n7hpr/po28.html
[ANS-WSR wishes to thanks Trevor, M5AKA and Jim, G3WGM, for this week's
information.]
[08072005]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon: 145.810 MHz (unmodulated carrier)

AO-10 has been locked into a Mode-B, 70-cm uplink and
2-meter downlink for several years.

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Non-operational

Uplink: 145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink: 435.812 MHz SSB
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Alberto E. Zagni - I2KBD reports on 02/13/05
The spacecraft is in MBL (safe mode) and is trasmitting just 6 channels
of telemetry. Temperatures and voltage are nominal, but there seems to
be a problem with the onboard receiver, refusing to accept commands.
The spacecraft was launched in 1993, thus nearing 12 years in orbit...

Best regards
Alberto E. Zagni - I2KBD
ITAMSAT Mission Director

More information of IO-26 can be found at:

http://joshua.micronet.it/english/itamsat/itamsathome.html
http://www.amsat.org/amsat/sats/n7hpr/io26.html
www.itamsat.org

[02132005]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon: 29.408 MHz
Robot: 29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB
Beacon: 145.860 MHz
Robot: 145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01092005]
=====

RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB
Beacon: 29.352 MHz (intermittent)
SSB meeting frequency: 29.380 MHz (unofficial)

John, KD6PAG reports on June 16, 2004 to ANS:
RS-15 beacon seemed to be back in the mode where it's a tone about 5
seconds off and then 5 seconds on this morning.

ANS is looking for more confirmations of RS-15 coming back.

[ANS thanks John, KD6PAG for RS-15 information]
[06202004]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplink: 145.84 145.86 145.88 145.90 MHz FM
(using 1200-baud Manchester FSK)
CW downlink: 437.125 MHz
Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)
Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM
Broadcast Callsign: HLO1-11
BBS: HLO1-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a
non-operational status.
[05092004]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM (9600-baud FSK)
Downlink: 436.500 MHz FM
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink frequency (listed on the PanSat web site) 436.500 MHz

The satellite is not available for general uplink transmissions.

The Naval Postgraduate School developed PanSat. At the time of
launch, PanSat spread-spectrum digital transponders were to
be available to Amateur Radio operators along with software to utilize
this technology.

The satellite is still operating, however, the spread spectrum packet
radio portion never took place. The spacecraft is now beyond it's
initial 2-year mission life, but telemetry records are still being
downloaded.

For more information, visit the official PanSat web site at:
http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS has no further information]
[05232004]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlink: 437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA
web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplink V-band 145.840 - 145.990 MHz CW/LSB
U-band 435.550 - 435.800 MHz CW/LSB
L1-band 1269.250 - 1269.500 MHz CW/LSB
L2-band 1268.325 - 1268.575 MHz CW/LSB
S1-band 2400.350 - 2400.600 MHz CW/LSB
Downlink: S2-band 2401.225 - 2401.475 MHz CW/USB
K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon: 2401.323, 24,048.035

[05232004]

SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational
Downlink: 437.075 MHz
Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz
Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
callsign KE6QMD, as per the user service agreement located at the
following
URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Semi-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

AO-49 (SAFIR-M) is a German amateur radio payload onboard the small German
scientific satellite "RUBIN-2".

AO-49 was built by the German amateur radio association "AATiS e.V." (German acronym for "Arbeitskreis Amateurfunk und Telekommunikation in der Schule", which means: 'working group for amateur radio anand telecommunications in schools'). AO-49 is designed as a "store and broadcast" system for APRS based messages, dedicated for the use of schools in combination with the existing WX-Net and planned buoy experiments in Germany.

No transmissions detected since the 1st of February 2003! It appears AO-49 is not properly aligned to illuminate the solar panels. This should end soon. Due to its orbit, AO-49 will be in a phase without eclipses until 13Feb03.

Martin DG8UAU has written a small software program "SAFIR-M Decoder" to allow decoding of the received DATA0 frames. It is available at: http://amend.gmxhome.de in the section Aktuelles.

Details on AO-49 (SAFIR-M) can be found at:
http://amend.gmxhome.de

Information about AATiS e.V. is available at:
http://www.aatis.de
[05092004]
NNNN
/EX

SB SAT @ AMSAT <KB9MMC $ANS-303.S4
WSR 303 Part 4 10/30/2005

AMSAT NEWS SERVICE BULLETIN 303.S4 FROM AMSAT HQ
SILVER SPRING, MD, OCTOBER 30,2005
TO ALL RADIO AMATEURS
BID: $ANS-303.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE
PROPOSED FOR LAUNCH AT THIS TIME:

UCISAT ?O-??
Catalog number:
Proposed Launch Date: October 31, 2005

Status: Under Construction

Downlink: Submission in Progress
Uplink: Submission in Progress
Callsign: Submission in Progress

This from Matt Bennett, KF6RTB, UCISAT Communications Team Member:

Our website is www.ucisat.net .This is a new website, however, and doesn't have the "Status" section active yet. Because of the growing interest in our project, I'll push our webmaster to create updates (hopefully) on a week-to-week basis. For now, the current status of the mission is as follows:

-Expected Launch Date: October 31st, 2005
-Frequency Allocation: Submission in Progress
-Construction Status: Sub-Assembly
[WSR to thank Matt Bennett, KF6RTB, for this week's report.]
[01302005]
=====
SSETI ?O-??
Catalog Number:
Launch Date: October 27, 2005

Status: ????

The SSETI Express satellite launched at 06:52 UTC on Thursday, 27 October 2005 on board a Kosmos 3M launcher. One hundred and three minutes later, exactly on schedule, the first signals were heard form the groundstation in Aalborg, and two-way communication was established. In addition to several successful communication sessions with SSETI Express, two of the Cubesat passengers, UWE-1 and Xi-V, have been heard by their groundstations.

An official release from ESA stated, "22:20 CEST SSETI Express went into a safe mode due to an undervoltage caused by battery charging problems. The operations team is working actively to resume nominal operations of the satellite and is receiving tremendous help in the process from the amateur radio community. At the time of the anomaly many mission milestones had already successfully
been met."

Graham, UA/G3VZV reports, "that it seems that no reliable reports of any signals have been received and the teams are reviewing all the telemetry already received to fully understand what is happening on board.Initial review suggests that there is a significant chance that the power supply problem may correct itself." Graham also advises that the command station in Aalborg is planning to try to try a blind command of the satellite into S band on mode - maybe on a Sunday am pass at 10:30 UTC.

As the statement above makes clear, ESA and the SSETI Association greatly value the input that amateur operators are providing and would ask amateurs around the world to continue to check for signals on 437.250MHz at the appropriate pass times. These signals may be short bursts of 9k6 data every 18 secs or bursts of pulse telemetry every 30 secs. Please understand that the pulse beacon decoder can produce spurious results on plain noise if over driven!

Anyone hearing anything that matches the above detail is requested to please email details to missioncontrol@sseti.org

The type of the first transmissions will depend on the state of the battery.

In Nominal mode - a sub 1 second burst of AX25 9k6 FSK telemetry every 18 seconds on the downlink frequency of 437.250 MHz.

In Recovery or Safe mode - simple on/off telemetry comprising 16 x 100 msec carrier pulses. This telemetry is repeated every 30 seconds in Safe Mode and every 2 minutes when in Recovery Mode.

The satellite will transmit at a power of 3 watts.

A daily report of the launch campaign is being maintained at http://sseti.gte.tuwien.ac.at/express/mop/index.php?uri=news.html This mission operations site is completely up-to-date regarding Kepler TLEs and other LEOP "Launch and Early Operations Phase" details.

The SERACC software, needed to decode and submit the received data to the SSETI database, together with some audio files containing recorded 9k6 signals to experiment with is also now available

The ESA website about SSETI Express is at:
http://www.esa.int/SPECIALS/sseti_express/SEMARJ7X9DE_0.html

The latest version of the SSETI Express handbook can be downloaded free of charge from the AMSAT-UK website at:
http://www.uk.amsat.org/

[ANS thanks Graham, UA/G3VZV and Trevor, M5AKA for the above]

More SSETI Links at:

SpaceDaily has a report about SSETI at:
http://www.spacedaily.com/news/internet-04zzzu.html

You can find more info about SSETI at:
http://sseti.gte.tuwien.ac.at/WSW4/

Latest news about SSETI can be found at:
http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php

Look at the website for the SSETI Express webcam
http://sseti.gte.tuwien.ac.at/WSW4/webcam.htm

[10302005]
=====
PHASE 3E ?O-??
Catalog Number:
Proposed Launch Date: Early 2006

Status: Under Construction

For the latest project status update please visit the AMSAT-DL P3-E web page:
http://www.amsat-dl.org/p3e/

[ANS-WSR wishes to thank William Leijenaar, PE1RAH for this week's report]
[10022005]
=====
CP1 ?o-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N6CP
Proposed Transmit Frequency: 436.845
[03272005]
=====
CP2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.325
[03272005]
=====
HAUSAT1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: D90HP
Proposed Transmit Frequency: 437.465
[03272005]
=====
ICE Cube 1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: W2CXM
Proposed Transmit Frequency: 437.305
[03272005]
=====
ICE Cube 2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N2VR
Proposed Transmit Frequency: 437.425
[03272005]
=====
ION ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.505
[03272005]
=====
KUTEsat ?O-??

Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: KC0RMW
Proposed Transmit Frequency: 437.385
[03272005]
=====
MEROPE ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: K7MSU-1
Proposed Transmit Frequency: 145.980
[03272005]
=====
nCUBE1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
2407.25
[03272005]
=====
RINCON ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
437.345
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SEEDS ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: JQ1YGU
Proposed Transmit Frequency: 437.485
[03272005]
=====
Mea Huaka ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.405
[03272005]
=====
SUITSAT ?O-??
Catalog Number:
Proposed Release Date: December 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: TBA

A video of the progress of Suitsat can be found at the following URL:
http://www.amsat.org/amsat-new/information/videoNews.php

To be released from an airlock of the International Space Station some
time
in December of 2005.
[10022005]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)

* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satelite Report Editor is James K. Darrow, KB9MMC.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

404. Re: WSR-303 AMSAT Weekly Satellite Report

Newsgroup: rec.radio.amateur.space
Date: 2005-11-03 21:31:47 UTC
From: Falky foo <falkyfoo@bonksbcglobal.net>
Message-ID: <7Ivaf.8016$D13.7327@newssvr11.news.prodigy.com>
Source record: 1868

I'd like to show you my satellite JoAnne

"JoAnne Maenpaa" <wb9jej_no-spam@earthlink.net> wrote in message
news:h0paf.4332$m81.1483@newsread1.news.atl.earthlink.net...
> This report is organized into 4 parts.
> Part 1 - operational analog amateur satellites.
> Part 2 - operational digital amateur satellites.
> Part 3 - non - operational satellites
> Part 4 - proposed satellites
>
> SB SAT @ AMSAT <KB9MMC $ANS-303.S1
> WSR 303 Part 1 10/30/2005

405. Re: WSR-303 AMSAT Weekly Satellite Report

Newsgroup: rec.radio.amateur.space
Date: 2005-11-04 03:55:24 UTC
From: **THE-RFI-EMI-GUY** <rhyolite@nettally.com>
Message-ID: <MYAaf.183577$xl6.163515@tornado.tampabay.rr.com>
Source record: 1869

It looks real tiny from here!

Falky foo wrote:

>I'd like to show you my satellite JoAnne
>
>
>
>"JoAnne Maenpaa" <wb9jej_no-spam@earthlink.net> wrote in message
>news:h0paf.4332$m81.1483@newsread1.news.atl.earthlink.net...
>
>
>>This report is organized into 4 parts.
>>Part 1 - operational analog amateur satellites.
>>Part 2 - operational digital amateur satellites.
>>Part 3 - non - operational satellites
>>Part 4 - proposed satellites
>>
>>SB SAT @ AMSAT <KB9MMC $ANS-303.S1
>>WSR 303 Part 1 10/30/2005
>>
>>
>
>
>
>

--
Joe Leikhim K4SAT
"The RFI-EMI-GUY"

"All Righty Then"

406. Re: WSR-303 AMSAT Weekly Satellite Report

Newsgroup: rec.radio.amateur.space
Date: 2005-11-05 02:54:07 UTC
From: Falky foo <falkyfoo@bonksbcglobal.net>
Message-ID: <j9Vaf.9687$7h7.5929@newssvr21.news.prodigy.com>
Source record: 1870

just wait for the perigee

"**THE-RFI-EMI-GUY**" <rhyolite@nettally.com> wrote in message
news:MYAaf.183577$xl6.163515@tornado.tampabay.rr.com...
> It looks real tiny from here!
>
> Falky foo wrote:
>
> >I'd like to show you my satellite JoAnne
> >
> >
> >
> >"JoAnne Maenpaa" <wb9jej_no-spam@earthlink.net> wrote in message
> >news:h0paf.4332$m81.1483@newsread1.news.atl.earthlink.net...
> >
> >
> >>This report is organized into 4 parts.
> >>Part 1 - operational analog amateur satellites.
> >>Part 2 - operational digital amateur satellites.
> >>Part 3 - non - operational satellites
> >>Part 4 - proposed satellites
> >>
> >>SB SAT @ AMSAT <KB9MMC $ANS-303.S1
> >>WSR 303 Part 1 10/30/2005
> >>
> >>
> >
> >
> >
> >
>
> --
> Joe Leikhim K4SAT
> "The RFI-EMI-GUY"
>
> "All Righty Then"

407. ANS-310 AMSAT Weekly News Service Bulletin

Newsgroup: rec.radio.amateur.space
Date: 2005-11-07 15:26:10 UTC
From: JoAnne Maenpaa <wb9jej_no-spam@earthlink.net>
Message-ID: <mmKbf.5992$m81.656@newsread1.news.atl.earthlink.net>
Source record: 1871

AMSAT NEWS SERVICE
ANS-310

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* SSETI Express Status
* AMSAT Journal Submissions
* Five Years of Ham Radio on the ISS
* AMSAT Store
* AO-51 New Schedule
* ARISS Status - 31 October 2005
* Suitsat Info available at AMSAT.ORG

SB SAT @ AMSAT $ANS-310.01
SSETI Express Status

AMSAT News Service Bulletin 310.01
From AMSAT HQ SILVER SPRING, MD.
November 6, 2005
To All RADIO AMATEURS
BID: $ANS-310.01

On Thursday, October 27, at 22:20 CEST SSETI Express went into a safe mode due to an undervoltage caused by battery charging problems. The operations team is working actively to resume nominal operations of the satellite and isreceiving tremendous help in the process from the amateur radio community.
At the time of the anomaly many mission milestones had already successfully been met.

Careful analysis of the data received, coupled with ground-based computer simulations and hardware tests, strongly support the proposed theory of a specific component failure in the excess power dissipation system.

Ground-based hardware tests confirm the possibility of a further failure mode of the specific component, which would allow the batteries to charge and the spacecraft to operate once again.

Testing is ongoing to ascertain the specific likelihood of this, and to investigate other possible alternative explanations.

Given that the spacecraft is currently inoperable, the mission cannot continue as planned. It is therefore on indefinite "standby", pending the technical possibility of re-activation of the spacecraft.

The team remain hopeful and vigilant. The primary groundstation and mission control centre are being configured for autonomous monitoring of the spacecraft, such that if it reactivates the team will be immediately alerted and ready to resume the mission.

The educational goals of the mission continue to be met daily as we try to analyse and understand the events since the launch.

Neil Melville - Project Manager

[ANS thanks Neil Melville of the SSETI Project Team for the above information]

/EX

SB SAT @ AMSAT $ANS-310.02
AMSAT Journal submission

AMSAT News Service Bulletin 310.02
From AMSAT HQ SILVER SPRING, MD.
November 6, 2005
To All RADIO AMATEURS
BID: $ANS-310.02

Everyone,

Ed Long is appealing for articles for the next AMSAT Journal issue. The Sep/Oct issue has been at the printer for a while now and I'm working on the Nov/Dec issue.

If you have something to contribute, hints and kinks, antenna you have found that actually works, how to build a satellite feed etc. or even an experience on one of the birds please submit it to Ed no later than Monday, November 21. That is slightly less than 3 weeks away. If you have something you would like to contribute, contact Ed and let him know that you're working on something.

Thanks for all your support of the Journal and get busy!!!

[ANS thanks Ed, WA4SWJ for the above information]

/EX

SB SAT @ AMSAT $ANS-310.03
Five Years of Ham Radio on the ISS

AMSAT News Service Bulletin 310.03
From AMSAT HQ SILVER SPRING, MD.
November 6, 2005

To All RADIO AMATEURS
BID: $ANS-310.03

==>HAM RADIO HAS ROLE IN FIVE YEARS OF CONTINUOUS ISS HUMAN HABITATION

Five years ago this week, the International Space Station Expedition 1 crew of US astronaut and Expedition 1 Commander William "Shep" Shepherd, KD5GSL, and Russian cosmonauts Yuri Gidzenko and Sergei Krikalev, U5MIR, became the first humans to inhabit the ISS on a long-term basis. Bill McArthur, KC5ACR, who commands Expedition 12, the current ISS crew increment, took note of the occasion when he spoke with reporters this week.

"We've done things that were just inconceivable 50 years ago," McArthur said. "I think that we have demonstrated that human beings can live and work in space, and, given the will, we can return to the moon not just to visit but to stay there permanently and in not-too-distant future, send people to Mars."

Bill Gerstenmaier, NASA's associate administrator for space operations, called the five-year milestone the first leg of a much longer journey "The experiences we're having on station with crews on long-duration missions are teaching us what it will take to send astronauts on longer missions to the moon and into the solar system," he said.

It was on October 31, 2000, that a Russian Soyuz transporter carrying the ISS space pioneers blasted off from Baikonur Cosmodrome in Kazakhstan and docked with the ISS November 2. At the time, Shepherd was only the second US astronaut to go into space aboard a Russian launch vehicle. Krikalev went on to serve as commander of the ISS Expedition 11 crew.

Each of the 12 crews that have lived on the ISS to conduct assembly and research activities has included at least one US radio amateur. McArthur just this week completed the 200th successful Amateur Radio on the International Space Station (ARISS) school group contact. Crews also have gone on the air to participate in such events as ARRL Field Day and scouting's Jamboree On The Air (JOTA) as well as to make casual QSOs. The Expedition 12 crew of McArthur and Russian cosmonaut Valery Tokarev will remain on the ISS until next April.

The initial ARISS gear already was aboard the space station by the time the first crew arrived. The Expedition 1 team installed and activated the VHF gear on FM voice and packet under the US call sign NA1SS and the Russian call sign RS0ISS.

In late 2003, the ARISS program attained another milestone with the installation and checkout of the Phase 2 Amateur Radio gear. A Kenwood TM-D700E transceiver is at the heart of the Phase 2 station, located in the ISS Zvezda Service Module--the crew's living quarters. Crew members now routinely use the Phase 2 station to conduct ARISS school group contacts.
ARISS is looking forward to activation of a Yaesu FT-100 HF/VHF/UHF transceiver and a slow-scan television (SSTV) system in the near future.

NASA has been marking the fifth anniversary of continuous ISS human occupancy with special activities and has set up a special Web site <http://www.nasa.gov/mission_pages/station/main/5_year_anniversary.html>.

The largest and most complex spacecraft ever built, the ISS is the result of a 16-nation partnership led by the US. More ISS information and photos are on NASA's Space Station page.

ARISS is an international educational outreach with US participation by ARRL, AMSAT and NASA.--some information from NASA

[ANS thanks the ARRL Letter Vol. 24 No. 43 for the above information]

/EX

SB SAT @ AMSAT $ANS-310.04
AMSAT Store

AMSAT News Service Bulletin 310.04
From AMSAT HQ SILVER SPRING, MD.
November 6, 2005
To All RADIO AMATEURS
BID: $ANS-310.04

The AMSAT store is open for business and is a great place to get AMSAT publications to learn more about a particular mode or satellite. There are items for sale for you to "show the colors" at your local club meeting. A perfect way to ensure your next idea of what satellite is put into orbit is to donate to a particular fund for it. You can even watch the fund grow into a sufficient launch campaign.

[ANS thanks Bruce, KK5DO, AMSAT Store Manager, for the above information]

/EX

SB SAT @ AMSAT $ANS-310.05
AO-51 Schedule

AMSAT News Service Bulletin 310.05
From AMSAT HQ SILVER SPRING, MD.
November 6, 2005
To All RADIO AMATEURS
BID: $ANS-310.05

The new schedule for AO-51 is posted on the AMSAT web site. It has a very interesting mode of ops coming up that you might find interesting - a VHF USB uplink Mode. The versatile satellite is proving that the planning before launch is paying off.

[ANS thanks Kyle Yoksh, K0KN for the above information]

/EX

SB SAT @ AMSAT $ANS-310.06
ARISS Status - 31 October 2005

AMSAT News Service Bulletin 310.06
From AMSAT HQ SILVER SPRING, MD.
November 6, 2005
To All RADIO AMATEURS
BID: $ANS-310.06
ARISS Status
October 31, 2005

1. Tomioka Elementary School Contact Successful

On October 24, Tomioka Elementary School of Urayasu in Urayasu City, Chiba, Japan had a successful contact with Bill McArthur, KC5ACR. Fourteen students asked one question each of the astronaut. Approximately 650 students, parents, teachers and other interested parties were present for the contact, as two television stations and ten newspapers covered the event. Audio and video of the contact are available on ARISS member Satoshi Yasuda's website. See: http://jk1zrw.dyndns.org/tomioka.html.en

2. Upcoming School Contacts

Kawachi Citizen's Committee for Youth in Miyoshi, Hiroshima, Japan has been approved for a direct contact on Thursday, November 3 at 07:44 UTC.

A contact for Istituto Comprensivo F. Negri in Casale Monferrato, Italy, has been scheduled for a contact on Wednesday, November 9 at 10:28 UTC via the telebridge station WH6PN in Hawaii.

Furtherwick Park School in Canvey Island, Essex, United Kingdom, has been approved for an ARISS contact. It is scheduled for Wednesday, November 9, 2005 at 17:45 UTC, and will be direct via GB2FPS.

3. ARRL Article on Tomioka Contact

ARRL covered the Tomioka Elementary School contact in the article, "New ISS Commander Delights Japanese Youngsters via Ham Radio." See: http://www.arrl.org/news/stories/2005/10/27/4/?nc=1

4. Astronaut Training

Astronauts Nicole Stott and Garrett Reisman wrapped up their amateur radio license training sessions on Wednesday, October 26.

5. Expedition 11 Crew Debrief

The U.S. debrief session with Expedition 11 crew member John Phillips, KE5DRY, is tentatively scheduled for Tuesday, November 8 at 4:00 pm ET.

6. NASA Night Article

Pine Ridge Middle School, located in Naples, Florida, held a "NASA Night" on September 27 to educate parents, teachers and students about NASA programs. The Southgate Amateur Radio Club set up an amateur radio station at the school so that children could speak with and ask questions of NASA employees. An article covering the event has been posted to the club's website. See:

http://www.southgatearc.org/news/october2005/nasa_night.htm

7. SuitSat Status

Progress 19P was launched on September 8, carrying the SuitSat hardware.
The Russian EVA to deploy SuitSat has been tentatively scheduled for
December 8, 2005.

[ANS thanks Carol, KB3LKI for the above information]

/EX

SB SAT @ AMSAT $ANS-310.07
SuitSat Info Available on AMSAT.ORG Web

AMSAT News Service Bulletin 310.07
From AMSAT HQ SILVER SPRING, MD.
November 6, 2005
To All RADIO AMATEURS
BID: $ANS-310.07

Now is the time to begin preparing your amateur radio station
to receive signals from SuitSat, the most unusual Amateur Radio
satellite ever orbited. SuitSat amateur radio equipment will be
installed inside a surplus Russian Orlan spacesuit. It will become
an independently orbiting satellite once it is deployed by the
crew of the International Space Station during an extravehicular
activity, tentatively planned around December 8, 2005.

Interested amateur radio operators are invited to read the whole
story on the web on AMSAT's front page, http://www.amsat.org.
Follow the links to see the photos and video of this exciting
new opportunity for amateur radio in space.

[ANS thanks the ARISS and SuitSat project teams for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the
President's Club. Members of the President's Club, as sustaining donors
to AMSAT Project Funds, will be eligible to receive additional benefits.
Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Dee Interdonato, NB2F
nb2f at amsat dot org

408. WSR-310 AMSAT Weekly Satellite Report

Newsgroup: rec.radio.amateur.space
Date: 2005-11-07 15:26:46 UTC
From: JoAnne Maenpaa <wb9jej_no-spam@earthlink.net>
Message-ID: <WmKbf.5993$m81.971@newsread1.news.atl.earthlink.net>
Source record: 1872

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This report is organized into 4 parts.
Part 1 - operational analog amateur satellites.
Part 2 - operational digital amateur satellites.
Part 3 - non - operational satellites
Part 4 - proposed satellites

SB SAT @ AMSAT <W8ISS $ANS-310.S1
WSR 310 Part 1 11/06/2005

AMSAT NEWS SERVICE BULLETIN 310.S1 FROM AMSAT HQ
SILVER SPRING, MD, November 06, 2005
TO ALL RADIO AMATEURS
BID: $ANS-310.S1

VO-52 HAMSAT
Catalog Number: 28650
Launch Date: May 05,2005

Status: Testing
Current Mode: U/V

Proposed frequencies:
-------------------
Indian transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacom : 145.940MHz continue carier signal

Dutch transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacon : 145.860MHz 12WPM with CW message
[07242005]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - ON
FM REPEATER - V/U

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
Analog voice uplink: 145.880 MHZ FM
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone
```

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

This from the AO-51 Command team:
6 Nov (Saturday night)
38k4 Digital Downlink, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 38k4 PBP Digital

10 Nov (Wed Night)
FM Repeater, V(ssb)/U (Experimental)
Uplink: 145.880 mhz USB
Downlink 435.300 mhz FM

14 Nov
FM Repeater, V/S
Uplink: 145.920 mhz FM, 67hz PL Tone
Downlink 2401.200 mhz FM

21 Nov
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital

5 Dec
FM Repeater, L/U
Uplink: 1268.700 mhz FM
Downlink 435.300 mhz FM

8 Dec (Wed Night)
9k6 Digital, V/U, High Power, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital

12 Dec
FM Repeater, V/S
Uplink: 145.920 mhz FM, No PL Tone
Downlink 2401.200 mhz FM

19 Dec
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital

[ANS-WSR thanks Mike Kingery, KE4AZN for the above information]
[11062005]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz (67.0 Hz PL tone) (See below for operating
procedures)
Downlink: 436.795 MHz

There have been unconfirmed reports on the amsat-bb remailer that SO-50
has shifted downlink frequency as much as 5khz up. This both from
Europe.

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary)

1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm
the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT
the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window
will reset the 10 minute timer.
[09122004]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplink: 145.850 145.870 145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

John, N4QWL reports on July 16th, 2005:

Last evening I had a AOS to LOS qso with WI2W. FO-29 came up at 01:17z
here in FM07 and I found WI2W and we chatted until 01:33z. The satellite
was
at 2 degrees elevation when I finally heard him start to crackle a bit.
What
a great QSO! To think that I watched this bird launch back in 1996 and
it

is still working so well is a real thrill. I believe I still have the
video. I might just look for it and watch it again. Boy do I love this
satellite stuff! Look for you all up there.

Please send the reception reports to lab2 'at' jarl.or.jp.
Please use the subject line: 'FO-29 reception report'.

Mineo, JE9PEL, has an FO-29 satellite telemetry analysis program that
will automatically analyze all digital telemetry from the satellite
(such as
current, voltage and temperature). FO29CWTE is available at:
http://www.ne.jp/asahi/hamradio/je9pel/
[ANS-WSR wishes to thanks John, N4QWL for this week's report]
[07172005]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

The latest information on AO-27 from control operator Michael Wyrick,
N3UC (former N4USI), can be found at:
http://www.ao27.org

An AO-27 question-and-answer page is available on the AMSAT-NA web
site, with updates by Ray, W2RS. The URL is:
http://www.amsat.org/amsat/intro/ao27faq.html

[ANS-WSR thanks John, K6YK, for this week's AO-27 report]
[08292004]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Semi-operational in sunlight.
Return to active status: June 21,2002

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A
145.975 to 145.925 MHz CW/USB Mode B
Beacon: 29.502 MHz, 145.972 MHz, 435.1 MHz, 2304.1 MHz

Emily, W0EEC has created a website to allow the users of AO-7 to record
contacts, observations and use of the satellite more effectively at:
http://www.emilyshouse.com/experthams/ao7/main.php
This includes the ability to log contacts.

Tim, K3TZ has written a program to decode AO-07 telemetry.
The program can be downloaded at:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

For more AO-7 info:
http://www.amsat.org/amsat/sats/n7hpr/ao7.html
[11142004]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: U/V CROSS-BAND REPEATER
Digipeater: Inactive

The current Expedition 12 crew is:
Commander: William McArthur - KC5ACR
Flight Engineer: Valery Tokarev - (no call)

Worldwide packet uplink: 145.990 MHz FM
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM
Doppler Shift is 10 KHz

Russian callsigns: RS0ISS, RZ3DZR
USA callsign: NA1SS
Packet station mailbox callsign: RS0ISS-11
Packet station keyboard callsign: RS0ISS-3
Digipeater callsign: ARISS

The ISS daily crew schedule can be found at:
http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is
NOT translated from Russian and posted.

More information is available at:
http://www.rac.ca/ariss
http://spaceflight.nasa.gov/station/reference/radio/
http://www.marexmg.org/fileshtml/unprotopage.html
http://www.issfanclub.com
http://oscar.dcarr.org/
[10162005]
NNNN
/EX

SB SAT @ AMSAT <W8ISS $ANS-310.S2
WSR 310 Part 2 11/06/2005

AMSAT NEWS SERVICE BULLETIN 310.S2 FROM AMSAT HQ
SILVER SPRING, MD, November 06, 2005
TO ALL RADIO AMATEURS
BID: $ANS-310.S2

PCSAT2 ?0-??
Catalog Number:
Launch Date: August 1, 2005

Status: Operational

PCSAT2 was installed on the exterior of the International Space
Station and was activated on August 3, 2005.

PCSAT2 CAPABILITIES: PCSAT2 is attached to the ISS and so its operations
must be in cooperation with the ARISS communications suite to minimize
any mutual interference and to coordinate activities. Here are the
capabilities of the PCSAT2 and ARISS payloads:

PCSAT SYSTEM A:

435.275 PCSAT2 DOWNLINK 1200 baud packet with uplink on 145.825
435.275 PCSAT2 DOWNLINK Occasional user PSK-31 continuous downlink
145.825 PCSAT2 DOWNLINK 1200 baud packet

PCSAT SYSTEM B:

437.975 PCSAT2 DOWNLINK periodic Solar Cell data and PCSAT2 telemetry at
9600 baud
437.975 PCSAT2 DOWNLINK TNC-B command downlink at 1200 baud
437.975 PCSAT2 DOWNLINK User Voice Repeater with VHF uplink
437.975 PCSAT2 DOWNLINK Packet digipeater with VHF uplink

It looks like PCSAT2 can best contribute at this time by operating in
PSK-31 mode for the near future. This is a very exciting new
transponder mode which solves the congestion problem on FM repeaters
by letting multiple stations all communicate at the same time.

PSK-31 users are welcome to try out the new PCSAT2 PSK-31 transponder
on ISS with an uplink on 29.402 +/- 1 KHz and downlink on 435.275 +/-
Doppler using FM.

The FM downlink lets everyone operate full duplex and everyone to see
the same view of the passband as everyone else. THus you can see
exactly
what your signal looks like to everyone else.

Help Wanted:

Here is your chance to become a viable part of the Amateur
Satellite Community.

We are looking for a volunteer satellite packet
station in Hawaii that is interested in helping with
telemetry and sat-gating of PCSAT2 and

ARISS packets. Requirements are:

1) General familiarity with packet
2) TNC connected to a cross band radio that
can RX on UHF and TX on VHF.
3) modest UHF beam and rotator system.

Contact WB4APR for more information.

Packets seen from PCSAT2 can be reviewed at:
http://www.findu.com/cgi-bin/pcsat2.cgi

A screen shot of both the 9600 bps and 1200 bps decoded data
as seen by Simon, 9W2QC, can be seen at:
http://www.9w2qc.net/pcsat2/

More information on PCSAT2 can be found at:
http://web.usna.navy.mil/~bruninga/pcsat2.html

[ANS-WSR thanks Bob, WB4APR and the U.S. Naval Academy Satellite Lab for
the aboveinformation.]

[08282005}
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - ON
FM REPEATER - V/U HIGH POWER

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
Analog voice uplink: 145.880 MHz FM
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

This from the AO-51 Command Team:
6 Nov (Saturday night)
38k4 Digital Downlink, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 38k4 PBP Digital

10 Nov (Wed Night)
FM Repeater, V(ssb)/U (Experimental)

Uplink: 145.880 mhz USB
Downlink 435.300 mhz FM

14 Nov
FM Repeater, V/S
Uplink: 145.920 mhz FM, 67hz PL Tone
Downlink 2401.200 mhz FM

21 Nov
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital

5 Dec
FM Repeater, L/U
Uplink: 1268.700 mhz FM
Downlink 435.300 mhz FM

8 Dec (Wed Night)
9k6 Digital, V/U, High Power, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital

12 Dec
FM Repeater, V/S
Uplink: 145.920 mhz FM, No PL Tone
Downlink 2401.200 mhz FM

19 Dec
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital
[ANS-WSR thanks Mike Kingery, KE4AZN for the above information]
[09252005]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Non-Operational?????

Uplink/downlink: 145.827 MHz 1200 baud AX.25 AFSK via W3ADO-1
Aux/Uplink: 435.250 MHz 9600 baud via PCSAT-2 (off)
APRS Downlink: 144.390 MHz (Region 2)

PCSat is a 1200-baud APRS digipeater designed for use by stations using
hand-held or mobile transceivers. Downlinks feed a central web site at:

http://pcsat.aprs.org

The APRS-equipped PCSat was built by midshipmen from the U.S. Naval Academy under the guidance of Bob Bruninga, WB4APR.
[07242005]
=====
CUTE-1
Catalog number: 27844
Launched: June 30,2003

Status: Operational

Uplink: ?
Downlink: 436.8375 CW
437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)
Cliff, K7RR reports:
In the latest Weekly Satellite Report, CUTE 1, #27844 is listed as OPERATIONAL?
Indeed it is very operational as a CUBESAT sending CW telemetry on 436.8345 MHz. At the July 7 2005, 23:45:20 pass over the Western USA:
CUTE 1 6B A4 xx 7F D7 66A8 4702 FF FF7C 65
CUTE 1 6C A6 59 80 D9 66A8 4702 FF FE7C B6

The June 30th KEPS were within ten seconds of AOS and LOS. It is an very good object to practice tracking as the orbit and transmitter power are similar to proposed CUBESATS awaiting launch this December. As a check for Doppler correction, the lack of change in tone is an excellent indicator.

CUTE 1 is a Japanese (Tokyo Institute of Technology) one kilogram nanosatellite that was launched by a Rokot rocket from Plesetsk at 14:15 UT on 30 June 2003. It carries a 100 mW beacon at 436.8375 MHz. Initial orbital parameters were period 101.4 min, apogee 831 km, perigee 819 km, and inclination 98.7?.

For further info about CUTE-1 goto:
http://lss.mes.titech.ac.jp/ssp/cubesat/operation/Schedule_e.html

[ANS WSR wishes to thank Cliff, K7RR, for this week's information]
[07242005]
=====
GO-32 TECHSAT-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
(435.325 n/a - temperature problems)
Uplinks: 145.850, 145.890, 145.930 FM
1269.700, 1269.800, 1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[03132005]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink: 145.850 or 145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz
Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[05152005]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for
APRS users.

Uplink: 145.90 145.92 145.94 145.96 MHz FM
(using 1200-baud Manchester FSK)
Downlink: 437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon: 2401.1428 MHz
Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

A WOD collection of current graphics along with general information
and telemetry samples can be found at:
http://www.telecable.es/personales/ea1bcu
[05092004]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational?

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK).
approx. 10 days ON, 10 days OFF
Mode-S Beacon: 2401.500 MHz. ... OFF
UHFBeacon: 435.025 MHz. ... OFF

During the period 24 September to 25 October 2005 the VHF beacon on 145.826MHz resumed transmissions, as expected, on 30 September, sometime between 06:05 and 06:42 UTC passes. Reasonable signals were also captured on the 17:44 pass, later that day. However by the 16:49 UTC pass on 02 October, the beacon had switched OFF. Transmissions resumed on 21 October, and should continue until around 31 October.

The on-board clock continues to show a very large error. Currently it is 19.2394 days slow, having lost six hours while the beacon was last OFF, ie. between 02 October and 21 October. When the beacon is ON, the clock is stable to within a few seconds.

All the analogue telemetry channels, 0 to 59 are zero, ie they have failed. The status channels 60 to 67 are still working.

The eclipses have now ended, and the satellite should be in continuous sunlight for the remainder of this year, and well into next year. This should help the satellite to continue transmitting, although continuous sunlight can cause problems due to excessive temperatures.

The watchdog timer appears to be operating on the 20 day cycle, ie. approximately ten days ON followed by 10 days OFF. It appears to be uneffected by problems of the on-board clock. However, poor solar attitude, and battery problems, may be combining to produce a low line voltage. This causes the beacon to switch OFF premeaturely, and resets the watchdog timer cycle.

The Beacon frequencies are -
VHF 145.826 MHz. AFSK FM ASCII Telemetry
UHF 435.025 MHz. OFF
S-band 2401.5 MHz. OFF

Listeners to OSCAR-11 may be interested in visiting my website which contains an archive of news & telemetry data. It also contains details about using a soundcard or hardware demodulators for data capture. There is software for capturing data, and decoding ASCII telemetry. The URL is
www.users.zetnet.co.uk/clivew/

If you place this bulletin on a terrestrial packet network, please use the bulletin identifier $BID:U2RPT114.CWV, to prevent duplication.

[ANS thanks Clive G3CWV for the above information]

More information on UO-11 OSCAR-11 can be found at:
http://www.users.zetnet.co.uk/clivew/

MPEG3 files can be found here at Mineo, JE9PEL website:
http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm

[10302005]
NNNN
/EX

SB SAT @ AMSAT <W8ISS $ANS-310.S3
WSR 310 Part 3 11/06/2005

AMSAT NEWS SERVICE BULLETIN 310.S3 FROM AMSAT HQ
SILVER SPRING, MD, NOVENBER 06, 2005
TO ALL RADIO AMATEURS
BID: $ANS-310.S3

THE FOLLOWING ARE IN ORBIT BUT ARE
NON-OPERATIONAL AT THIS TIME:

POSAT-1 PO-28
Catalog Number: 22829
Launched : September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 435.250 MHz
435.275 MHz

Uplink: 145.925 MHz
145.975 MHz

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

PO-28 (POSAT-1), Portugal's first satellite, launched 12 years ago,will be
turned over to Amateur Radio use in the very near future. That was the word
July 30 from AMSAT-UK Secretary Jim Heck, G3WGM, during the AMSAT-UK Internat-
ional Space Colloquium in Guildford, England.

Launched September 25, 1993, the satellite operated as a packet store-and-for-
ward BBS (9600 baud FM FSK) on Amateur Radio frequencies for several weeks in
early 1994. Over the years, PO-28's primary usage has been commercial,
although plans have called for eventually shifting its operation to ham radio
use. G3WGM reports that following lengthy negotiations it has been agreed that
the satellite can be switched permanently to amateur frequencies. The change-
over is expected to take a couple of weeks.

The Portuguese satellite was built at the University of Surrey as part of a
collaborative satellite technology program that involved industry and academe.
Uplink frequencies will be 145.925 and 145.975 MHz. Downlink frequencies will
be 435.250 and 435.275 MHz. More information on PO-28 is on the AMSAT

Web site

http://www.amsat.org/amsat/sats/n7hpr/po28.html.

Uplink Frequencies: 145.925 and 145.975 MHz
Downlink Frequencies: 435.250 and 435.275 MHz

Orbit: 822 x 800 km, 98.6 deg inclined, sun-synchronous.

Transponder capabilities include FM repeater and 38k4 data. If you want
to hear how loud this satellite is, listen on 429.950 until the change
back to amateur radio service.

Keplerian elements for PO-28 are currently contained in the AMSAT keps
bull-
etins and at Celestrak in amateur.txt using the name "POSAT". Users of
Space
Track should query the NORAD Satellite ID number 22829. The name listed
by
Space Track is "EYESAT A".

More information of POSAT-1 can be found at:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
http://www.amsat.org/amsat/sats/n7hpr/po28.html
[ANS wishes to thank Duane Naugle, KO6BT, for this week's update.]
[11062005]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon: 145.810 MHz (unmodulated carrier)

AO-10 has been locked into a Mode-B, 70-cm uplink and
2-meter downlink for several years.

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Non-operational

Uplink: 145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink: 435.812 MHz SSB
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Alberto E. Zagni - I2KBD reports on 02/13/05
The spacecraft is in MBL (safe mode) and is trasmitting just 6 channels
of telemetry. Temperatures and voltage are nominal, but there seems to
be a problem with the onboard receiver, refusing to accept commands.
The spacecraft was launched in 1993, thus nearing 12 years in orbit...

Best regards
Alberto E. Zagni - I2KBD
ITAMSAT Mission Director

More information of IO-26 can be found at:

http://joshua.micronet.it/english/itamsat/itamsathome.html
http://www.amsat.org/amsat/sats/n7hpr/io26.html
www.itamsat.org

[02132005]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon: 29.408 MHz
Robot: 29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB
Beacon: 145.860 MHz
Robot: 145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575

Launched: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB
Beacon: 29.352 MHz (intermittent)
SSB meeting frequency: 29.380 MHz (unofficial)

John, KD6PAG reports on June 16, 2004 to ANS:
RS-15 beacon seemed to be back in the mode where it's a tone about 5
seconds off and then 5 seconds on this morning.

ANS is looking for more confirmations of RS-15 coming back.

[ANS thanks John, KD6PAG for RS-15 information]
[06202004]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplink: 145.84 145.86 145.88 145.90 MHz FM
(using 1200-baud Manchester FSK)
CW downlink: 437.125 MHz
Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)
Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM
Broadcast Callsign: HLO1-11
BBS: HLO1-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a
non-operational status.
[05092004]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM (9600-baud FSK)
Downlink: 436.500 MHz FM
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink frequency (listed on the PanSat web site) 436.500 MHz

The satellite is not available for general uplink transmissions.

The Naval Postgraduate School developed PanSat. At the time of
launch, PanSat spread-spectrum digital transponders were to
be available to Amateur Radio operators along with software to utilize
this technology.

The satellite is still operating, however, the spread spectrum packet
radio portion never took place. The spacecraft is now beyond it's
initial 2-year mission life, but telemetry records are still being
downloaded.

For more information, visit the official PanSat web site at:
http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS has no further information]
[05232004]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlink: 437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA
web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609

Launch Date: November 16, 2000

Status: Non-Operational

Uplink V-band 145.840 - 145.990 MHz CW/LSB
U-band 435.550 - 435.800 MHz CW/LSB
L1-band 1269.250 - 1269.500 MHz CW/LSB
L2-band 1268.325 - 1268.575 MHz CW/LSB
S1-band 2400.350 - 2400.600 MHz CW/LSB
Downlink: S2-band 2401.225 - 2401.475 MHz CW/USB
K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon: 2401.323, 24,048.035
[05232004]

SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational
Downlink: 437.075 MHz
Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz
Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
callsign KE6QMD, as per the user service agreement located at the
following
URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Semi-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

AO-49 (SAFIR-M) is a German amateur radio payload onboard the small
German
scientific satellite "RUBIN-2".

AO-49 was built by the German amateur radio association "AATiS
e.V." (German acronym for "Arbeitskreis Amateurfunk und
Telekommunikation
in der Schule", which means: 'working group for amateur radio anand
telecommunications in schools'). AO-49 is designed as a "store and
broadcast" system for APRS based messages, dedicated for the use of
schools in combination with the existing WX-Net and planned buoy
experiments in Germany.

No transmissions detected since the 1st of February 2003! It appears
AO-49 is not properly aligned to illuminate the solar panels. This
should end soon. Due to its orbit, AO-49 will be in a phase without
eclipses until 13Feb03.

Martin DG8UAU has written a small software program "SAFIR-M Decoder" to
allow decoding of the received DATA0 frames. It is available at:
http://amend.gmxhome.de in the section Aktuelles.

Details on AO-49 (SAFIR-M) can be found at:
http://amend.gmxhome.de

Information about AATiS e.V. is available at:
http://www.aatis.de
[05092004]
NNNN
/EX

SB SAT @ AMSAT <W8ISS $ANS-310.S4
WSR 310 Part 4 11/06/2005

AMSAT NEWS SERVICE BULLETIN 310.S4 FROM AMSAT HQ
SILVER SPRING, MD, NOVEMBER 06,2005

TO ALL RADIO AMATEURS
BID: $ANS-310.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE
PROPOSED FOR LAUNCH AT THIS TIME:

UCISAT ?O-??
Catalog number:
Proposed Launch Date: October 31, 2005

Status: Under Construction

Downlink: Submission in Progress
Uplink: Submission in Progress
Callsign: Submission in Progress

This from Matt Bennett, KF6RTB, UCISAT Communications Team Member:

Our website is www.ucisat.net .This is a new website, however, and
doesn't have the "Status" section active yet. Because of the growing
interest in our project, I'll push our webmaster to create updates
(hopefully) on a week-to-week basis. For now, the current status of
the mission is as follows:

-Expected Launch Date: October 31st, 2005
-Frequency Allocation: Submission in Progress
-Construction Status: Sub-Assembly
[WSR to thank Matt Bennett, KF6RTB, for this week's report.]
[01302005]
=====
SSETI ?O-??
Catalog Number:
Launch Date: October 27, 2005

Status: ????

The SSETI Express satellite launched at 06:52 UTC on Thursday, 27
October 2005 on board a Kosmos 3M launcher. One hundred and three
minutes later, exactly on schedule, the first signals were heard form
the groundstation in Aalborg, and two-way communication was established.
In addition to several successful communication sessions with SSETI
Express, two of the Cubesat passengers, UWE-1 and Xi-V, have been heard
by their groundstations.

An official release from ESA stated, "22:20 CEST SSETI Express went into
a safe mode due to an undervoltage caused by battery charging problems.
The operations team is working actively to resume nominal operations of
the satellite and is receiving tremendous help in the process from the
amateur radio community. At the time of the anomaly many mission
milestones had already successfully
been met."

Graham, UA/G3VZV reports, "that it seems that no reliable reports of any
signals have been received and the teams are reviewing all the telemetry

already received to fully understand what is happening on board.Initial review suggests that there is a significant chance that the power supply problem may correct itself." Graham also advises that the command station in Aalborg is planning to try to try a blind command of the satellite into S band on mode - maybe on a Sunday am pass at 10:30 UTC.

As the statement above makes clear, ESA and the SSETI Association greatly value the input that amateur operators are providing and would ask amateurs around the world to continue to check for signals on 437.250MHz at the appropriate pass times. These signals may be short bursts of 9k6 data every 18 secs or bursts of pulse telemetry every 30 secs. Please understand that the pulse beacon decoder can produce spurious results on plain noise if over driven!

Anyone hearing anything that matches the above detail is requested to please email details to missioncontrol@sseti.org

The type of the first transmissions will depend on the state of the battery.

In Nominal mode - a sub 1 second burst of AX25 9k6 FSK telemetry every 18 seconds on the downlink frequency of 437.250 MHz.

In Recovery or Safe mode - simple on/off telemetry comprising 16 x 100 msec carrier pulses. This telemetry is repeated every 30 seconds in Safe Mode and every 2 minutes when in Recovery Mode.

The satellite will transmit at a power of 3 watts.

A daily report of the launch campaign is being maintained at http://sseti.gte.tuwien.ac.at/express/mop/index.php?uri=news.html This mission operations site is completely up-to-date regarding Kepler TLEs and other LEOP "Launch and Early Operations Phase" details.

The SERACC software, needed to decode and submit the received data to the SSETI database, together with some audio files containing recorded 9k6 signals to experiment with is also now available

The ESA website about SSETI Express is at:
http://www.esa.int/SPECIALS/sseti_express/SEMARJ7X9DE_0.html

The latest version of the SSETI Express handbook can be downloaded free of charge from the AMSAT-UK website at:
http://www.uk.amsat.org/

[ANS thanks Graham, UA/G3VZV and Trevor, M5AKA for the above]

More SSETI Links at:

SpaceDaily has a report about SSETI at:
http://www.spacedaily.com/news/internet-04zzzu.html

You can find more info about SSETI at:
http://sseti.gte.tuwien.ac.at/WSW4/

Latest news about SSETI can be found at:
http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php

Look at the website for the SSETI Express webcam
http://sseti.gte.tuwien.ac.at/WSW4/webcam.htm

[10302005]
=====
PHASE 3E ?O-??
Catalog Number:
Proposed Launch Date: Early 2006

Status: Under Construction

For the latest project status update please visit the AMSAT-DL
P3-E web page:
http://www.amsat-dl.org/p3e/

[ANS-WSR wishes to thank William Leijenaar, PE1RAH for this week's
report]
[10022005]
=====
CP1 ?o-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N6CP
Proposed Transmit Frequency: 436.845
[03272005]
=====
CP2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.325
[03272005]
=====
HAUSAT1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: D90HP
Proposed Transmit Frequency: 437.465
[03272005]
=====
ICE Cube 1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: W2CXM
Proposed Transmit Frequency: 437.305
[03272005]
=====

ICE Cube 2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N2VR
Proposed Transmit Frequency: 437.425
[03272005]
=====
ION ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.505
[03272005]
=====
KUTEsat ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: KC0RMW
Proposed Transmit Frequency: 437.385
[03272005]
=====
MEROPE ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: K7MSU-1
Proposed Transmit Frequency: 145.980
[03272005]
=====
nCUBE1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
2407.25
[03272005]
=====
RINCON ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
437.345
[03272005]
=====
SACRED ?O-??
Catalog Number:

Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SEEDS ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: JQ1YGU
Proposed Transmit Frequency: 437.485
[03272005]
=====
Mea Huaka ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.405
[03272005]
=====
SUITSAT ?O-??
Catalog Number:
Proposed Release Date: Mid-December 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: TBA

This from Miles, WF1F:
At the present time there are tentative plans to have a Space Walk (EVA)
tak-
ing place from ISS sometime around December 8, 2005. It is possible
that dur-
ing this Space Walk, the ISS crew may Hand launch the ARISS SuitSat
project
during that EVA mission. Again, all date are subject to last minute
changes.
Please Keep monitoring the ARISS and AMSAT web pages for more updates.

The SuitSat project is a free floating Unmanned satellite that will be
running
on Batteries Only! The life span of the project will be limited to the
power

in the batteries. SuitSat may last as little as 1 week or as long as 6 weeks.
So it is very important for you to get your satellite monitoring station ready
now. You should not wait for the Official activation date, because you may
miss the opportunity to hear the new bird.

I will keep posting updated links for the SuitSat project as they become available.

A video of the progress of Suitsat can be found at the following URL:
http://www.amsat.org/amsat-new/information/videoNews.php
[11062005]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satelite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

409. Radio Meteor Obs. Bull. October 2005

Newsgroup: rec.radio.amateur.space
Date: 2005-11-07 22:31:58 UTC
From: Chris Steyaert <observations@rmob.org>
Message-ID: <0elvm115r3agqbf3f22sah7j4k570bbj0c@4ax.com>
Source record: 1873
Cross-posted to: rec.radio.amateur.space,sci.astro.amateur

Radio Meteor Observation Bulletin No. 147 of October 2005 (63 K) is available now as

http://visualrmob.free.fr/rmobtext/rmob0510.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

http://radio.data.free.fr

Chris

410. Naval connection? You qualify for RNARS membership!

Newsgroup: rec.radio.amateur.space
Date: 2005-11-08 12:06:54 UTC
From: Mike <mike@my1biz.com>
Message-ID: <dkq4cu$2c7$2@nwrdmz02.dmz.ncs.ea.ibs-infra.bt.com>
Source record: 1874

Membership of the Royal Naval Amateur Radio Society (RNARS) is open to all who have an
interest in any facet of amateur radio and who are serving or who have served in the following:

Royal Navy
Royal Marines
Royal Naval Reserve
Royal Marine Reserve
Women's Royal Naval Service
Royal Naval Auxiliary Service
Royal Fleet Auxiliary
Merchant Navy
Sea Cadets Corps
Nautical Training Corps
MOD (Navy)
Commonwealth and Foreign Navies

NON-MEMBERS can purchase RNARS commodities.

Details and membership application form is available online at
http://www.rnars.org.uk

411. Re: Radio Meteor Obs. Bull. October 2005

Newsgroup: rec.radio.amateur.space
Date: 2005-11-08 18:42:00 UTC
From: canopus56 <canopus56@yahoo.com>
Message-ID: <1131475320.713276.209400@z14g2000cwz.googlegroups.com>
Source record: 1875
Cross-posted to: rec.radio.amateur.space,sci.astro.amateur

X-Archive: No
Chris, thanks for posting these updates. - Canopus56

412. ANS-317 AMSAT News Service Weekly Bulletin

Newsgroup: rec.radio.amateur.space
Date: 2005-11-15 01:04:36 UTC
From: JoAnne Maenpaa <wb9jej_no-spam@earthlink.net>
Message-ID: <Euaef.8663$2y.5953@newsread2.news.atl.earthlink.net>
Source record: 1877

AMSAT NEWS SERVICE
ANS-317

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:

* SuitSat Possible Activation December 2005
* SSETI Express Designated XO-53
* ARISS Status November 7, 2005
* PCSAT2 Amateur Radio Military Appreciation Day
* AMSAT Volunteer In-Kind Reporting System

SB SAT @ AMSAT $ANS-317.01
SuitSat Possible Activation December 2005

AMSAT News Service Bulletin 317.01
From AMSAT HQ SILVER SPRING, MD.
November 13, 2005
To All RADIO AMATEURS
BID: $ANS-317.01

A note to readers of ANS. Since the SuitSat project encompasses both a free floating unmanned satellite and is being hand launched from a Manned satellite, there will be some double postings regarding the SuitSat project on both the SAREX and AMSAT-BB mailing lists.

If you are not currently on the SAREX list, you may want to check the AMSAT link to sign up for both so you do not miss the additional projects coming this year, and early 2006.
http://www.amsat.org/amsat-new/tools/maillist/maillist.php

SuitSat, Slow Scan TV from ISS in 5 weeks?

Slow Scan TV from the SuitSat project, launched from the International Space Station, may be activated in as little as 5 weeks. Note: All dates are subject to change.

At the present time there are tentative plans to have a Space Walk (EVA) taking place from ISS sometime around December 8, 2005. It is possible that

during this Space Walk, the ISS crew may "Hand" launch the ARISS SuitSat project during that EVA mission. Again, all date are subject to last minute changes. Please Keep monitoring the ARISS and AMSAT web pages for more updates.

The SuitSat project is a free floating Unmanned satellite that will be running on Batteries Only! The life span of the project will be limited to the power in the batteries. SuitSat may last as little as 1 week or as long as 6 weeks. So it is very important for you to get your satellite monitoring station ready now. You should not wait for the Official activation date, because you may miss the opportunity to hear the new bird.

I will keep posting updated links for the SuitSat project as they become available.

SuitSat Specific links:

AMSAT front page:
http://www.amsat.org

SuitSat Article:
http://www.amsat.org/amsat-new/articles/SuitSat/

AMSAT Video News:
http://www.amsat.org/amsat-new/information/videoNews.php
(and watch the SuitSat video)

Frank Bauer's, KA3HDO, article "This Is SuitSat-1 RS0RS":
http://www.amsat.org/amsat-new/articles/BauerSuitsat/index.php

"SuitSat," New ARISS SSTV Gear Arrives at International Space Station. See:
http://www.arrl.org/news/stories/2005/09/16/2/?nc=1

SSTV details:
The SuitSat project will transmit, Telemetry, Pre-Recorded Voice messages and one SSTV image. The whole process will repeat approximately every 9 minutes. (Robot 36 format).

All transmissions will be in FM mode and will be on the 2-meter amateur radio satellite band. The current frequency for SuitSat is 145.990 FM Downlink only (There is no uplink for this satellite). This means that the Doppler frequency drift will not be much of a problem and you will be able to use your existing 2-meter station or a police scanner to hear and decode the signals SuitSat.

If you have already have been successful in working the Packet station or talked to the ISS crew on 2-meter voice, than you already have most of what you need. What's left is to connect your computer to the speaker of your radio and some SSTV decoding software, such as ChromaPix or similar software. See:
http://www.barberdsp.com/

So have fun, find your best setup and start practicing how to decode SSTV on 2-meters.

Slow Scan TV Decoding Software:
Here are just two of the many Share-Ware SSTV applications on the market.
There may be many more.

W95SSTV by Silicon Pixels
http://www.barberdsp.com/w95sstv/w95dload.htm

MMSSTV
http://mmhamsoft.ham-radio.ch/

There are also many High quality pay software applications that offer many
more features, such as multiple windows that allow your to simultaneously
receive an image while preparing your next image that you want to transmit.

CPIX
http://www.barberdsp.com/

What is Slow Scan TV:
On this web page you will find many links to help you learn more about Slow
Scan TV:
http://www.marexmg.org/fileshtml/sstvlinkpage.html

Tips on how to use ISS, SSTV, Packet and Voice:
http://www.marexmg.org/fileshtml/howtouseiss.html

Location of Hardware on ISS:
This link will show you images of some of the amateur radio hardware already
installed on ISS:
http://www.marexmg.org/fileshtml/radiohardware.html

Marexmg Web Page
http://www.marexmg.org

[ANS thanks Miles, WF1F for the above information]

/EX

SB SAT @ AMSAT $ANS-317.02
SSETI Express Designated XO-53

AMSAT News Service Bulletin 317.02
From AMSAT HQ SILVER SPRING, MD.
November 13, 2005
To All RADIO AMATEURS
BID: $ANS-317.02

The SSETI Express Team has met the requirements to earn their satellite the
official designator of Express Oscar 53, or XO-53.

Bill Tynan, Past AMSAT President, and presently OSCAR number coordinator,
wrote to the SSETI Team, "From the information you have sent to the AMSAT-NA
Board and officials regarding this project, it has been determined that the
SSETI Express
spacecraft IS qualified to receive an OSCAR number."

Bill continues, "Therefore, by the authority vested in me by the AMSAT-NA President, I am pleased to issue this new amateur satellite the designation Express OSCAR - 53, or XO-53 as you requested. "Congratulations to all involved in the successful completion and launch of XO-53".

For information about the requirements that must be satisfied in order to obtain an OSCAR designation refer to:
http://www.amsat.org/amsat-new/information/faqs/numbers.php

[ANS thanks Bill, W3XO for the above information]

/EX

SB SAT @ AMSAT $ANS-317.03
ARISS Status November 7, 2005

AMSAT News Service Bulletin 317.03
From AMSAT HQ SILVER SPRING, MD.
November 13, 2005
To All RADIO AMATEURS
BID: $ANS-317.03

1. Kawachi School Contact Successful

On November 3, students from the Kawachi Citizen's Committee for Youth in Miyoshi, Hiroshima, Japan experienced a successful contact with astronaut Bill McArthur, KC5ACR. Nineteen children each posed a question to Bill during the Q & A session, as an audience of approximately 110 students, parents and others gathered for the event. Media coverage included 5 television stations and 3 newspapers. The audio and video of the contact are available on the following website:
http://jk1zrw.dyndns.org/kawachi.html.en

2. Upcoming School Contacts

Hermann Middle School in Hermann, Missouri has been scheduled for a contact on Wednesday, November 16 at 18:58 UTC.

3. Astronaut Training Status

Astronaut Nicole Stott took and passed her amateur radio exam on Friday, October 28, and was issued the callsign, KE5GJN. Stott is currently in the future ISS crew selection pool.

The last 6 unlicensed astronaut candidates from the class of 2004 were tentatively scheduled for an amateur radio license training session on November 10.

4. Expedition 11 Crew Debrief

The U.S. debrief session with Expedition 11 crew member John Phillips, KE5DRY, is tentatively scheduled for Tuesday, November 15 at 4:00 pm ET. (Note the change in date.)

5. ARRL Article on ISS Anniversary

On November 1, ARRL posted a web story covering the fifth anniversary of the ISS and amateur radio. "Ham radio has role in five years of continuous ISS human habitation," may be found at:
http://www.arrl.org/

6. ARISS International Teleconference Held

The monthly ARISS International teleconference was held on Tuesday, October 25. Among the agenda items discussed were the Columbus Module antennas and SuitSat status. The next international meeting will be held on November 15.

7. Astronaut Active on Voice

Astronaut Bill McArthur has been engaging children in his school contacts, but he also has hams around the world smiling as he makes voice contacts with the general public. McArthur was active over Australia on Friday, October 28, and again over Europe on November 3, making contacts with stations in the U.K. and Italy.

8. ARISS Mini-TIM Planned

The ARISS team may hold a Technical Interchange Meeting (TIM) in the Goddard Space Flight Center area in early January 2006. Agenda items are being compiled as team members begin to p lanfortheconference.

9. ARISS International Face-to-Face Meeting

The minutes and presentations from the ARISS International Face-to-Face Meeting held in the U.K. in August 2005 have been posted to the AMSAT website. See:
http://www.amsat.org/amsat/ariss/Meetings/2005_Surrey/2005_Surrey_ARISS-I_Minutes.pdf

[ANS thanks Carol, KB3LKI for the above information]

/EX

SB SAT @ AMSAT $ANS-317.04
PCSAT2 Amateur Radio Military Appreciation Day

AMSAT News Service Bulletin 317.04
From AMSAT HQ SILVER SPRING, MD.
November 13, 2005
To All RADIO AMATEURS
BID: $ANS-317.04

On all USA passes on 14 Nov, PCSAT2 (on ISS) will be operating with a one-way NET Control voice downlink to acknowledge packet checkins from any packet hams on 145.825 uplink as part of Amateur Radio Military Appreciation Day.

During these passes over the USA only, the normal ARISS digipeater may be disabled. Users desiring to participate simply transmit their packet as usual on the 145.825 PCSAT2 uplink using the path VIA ARISS and listen for voice downlink acknowledgment on 437.975 +/- Doppler. Their packet should also be digipeated on 435.275 downlink.

These details are posted on the PCSAT2 web page:
http://www.ew.usna.edu/~bruninga/pcsat2.html

[ANS thanks Bob, WB4APR for the above information]

/EX

SB SAT @ AMSAT $ANS-317.05
AMSAT Volunteer In-Kind Reporting System

AMSAT News Service Bulletin 317.05
From AMSAT HQ SILVER SPRING, MD.
November 13, 2005
To All RADIO AMATEURS
BID: $ANS-317.05

Attention all AMSAT members who volunteer time for AMSAT projects:

Just a reminder that we wish to keep track of all your efforts on behalf of AMSAT projects.. Please keep track of your hours and report them to AMSAT via the VRS (Volunteer Reporting System) on amsat.org. We are nearing year end and are well behind last years numbers.

If you are new to the VRS system, it works like this:

Go to amsat.org
Select: "Become a Volunteer" from the panels on the left side of the Home Page.
Select #2: "Read "About the Volunteer Reporting System" and create a VRS account". This will give you full details.
To become a user: Send an e-mail to in-kind@amsat.org. Include the USER NAME you wish to use when reporting hours to the AMSAT database. (CASE SENSITIVE)

We will confirm receipt of your request and then you will be ready to participate. Upon opening an account: Report hours as often as you wish. Remember, your filings are confidential. We will only publish grand totals with no names or hourly rates made public.

Thank you for your support of this important AMSAT system.

[ANS thanks Gunther, W8GSM for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Al Marote, WA1LBG
wa1lbg at amsat dot org

413. WSR-317 AMSAT Weekly Satellite Report

Newsgroup: rec.radio.amateur.space
Date: 2005-11-15 01:04:39 UTC
From: JoAnne Maenpaa <wb9jej_no-spam@earthlink.net>
Message-ID: <Huaef.8664$2y.2736@newsread2.news.atl.earthlink.net>
Source record: 1878

```
This report is organized into 4 parts.
Part 1 - operational analog amateur satellites.
Part 2 - operational digital amateur satellites.
Part 3 - non - operational satellites
Part 4 - proposed satellites

SB SAT @ AMSAT <W8ISS $ANS-317.S1
WSR 317 Part 1 11/13/2005

AMSAT NEWS SERVICE BULLETIN 317.S1 FROM AMSAT HQ
SILVER SPRING, MD, November 13, 2005
TO ALL RADIO AMATEURS
BID: $ANS-317.S1

VO-52 HAMSAT
Catalog Number: 28650
Launch Date: May 05,2005

Status: Testing
Current Mode: U/V

Proposed frequencies:
-------------------
Indian transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacom : 145.940MHz continue carier signal

Dutch transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacon : 145.860MHz 12WPM with CW message
[07242005]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - ON
FM REPEATER - V/S

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
Analog voice uplink: 145.880 MHZ FM
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone
```

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

This from the AO-51 Command team:
6 Nov (Saturday night)
38k4 Digital Downlink, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 38k4 PBP Digital

14 Nov
FM Repeater, V/S
Uplink: 145.920 mhz FM, 67hz PL Tone
Downlink 2401.200 mhz FM

21 Nov
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital

5 Dec
FM Repeater, L/U
Uplink: 1268.700 mhz FM
Downlink 435.300 mhz FM

8 Dec (Wed Night)
9k6 Digital, V/U, High Power, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital

12 Dec
FM Repeater, V/S
Uplink: 145.920 mhz FM, No PL Tone
Downlink 2401.200 mhz FM

19 Dec
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital

[ANS-WSR thanks Mike Kingery, KE4AZN for the above information]
[11132005]
=====
SO-50 SAUDISAT-1C

Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz (67.0 Hz PL tone) (See below for operating
procedures)
Downlink: 436.795 MHz

There have been unconfirmed reports on the amsat-bb remailer that SO-50
has shifted downlink frequency as much as 5khz up. This both from
Europe.

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz.
The order of operation is thus: (allow for Doppler as necessary)

1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm
the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT
the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window
will reset the 10 minute timer.
[09122004]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplink: 145.850 145.870 145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

John, N4QWL reports on July 16th, 2005:

Last evening I had a AOS to LOS qso with WI2W. FO-29 came up at 01:17z
here in FM07 and I found WI2W and we chatted until 01:33z. The satellite
was
at 2 degrees elevation when I finally heard him start to crackle a bit.
What
a great QSO! To think that I watched this bird launch back in 1996 and
it
is still working so well is a real thrill. I believe I still have the
video. I might just look for it and watch it again. Boy do I love this
satellite stuff! Look for you all up there.

Please send the reception reports to lab2 'at' jarl.or.jp.
Please use the subject line: 'FO-29 reception report'.

Mineo, JE9PEL, has an FO-29 satellite telemetry analysis program that
will automatically analyze all digital telemetry from the satellite
(such as
current, voltage and temperature). FO29CWTE is available at:
http://www.ne.jp/asahi/hamradio/je9pel/
[ANS-WSR wishes to thanks John, N4QWL for this week's report]
[11132005]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

The latest information on AO-27 from control operator Michael Wyrick,
N3UC (former N4USI), can be found at:
http://www.ao27.org

An AO-27 question-and-answer page is available on the AMSAT-NA web
site, with updates by Ray, W2RS. The URL is:
http://www.amsat.org/amsat/intro/ao27faq.html

[ANS-WSR thanks John, K6YK, for this week's AO-27 report]
[11132005]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Semi-operational in sunlight.
Return to active status: June 21,2002

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A
145.975 to 145.925 MHz CW/USB Mode B
Beacon: 29.502 MHz, 145.972 MHz, 435.1 MHz, 2304.1 MHz

Emily, W0EEC has created a website to allow the users of AO-7 to record
contacts, observations and use of the satellite more effectively at:
http://www.emilyshouse.com/experthams/ao7/main.php
This includes the ability to log contacts.

Tim, K3TZ has written a program to decode AO-07 telemetry.
The program can be downloaded at:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

For more AO-7 info:
http://www.amsat.org/amsat/sats/n7hpr/ao7.html

[11132005]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: DIGIPEATER
Digipeater: ACTIVE

The current Expedition 12 crew is:
Commander: William McArthur - KC5ACR
Flight Engineer: Valery Tokarev - (no call)

Worldwide packet uplink: 145.990 MHz FM
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM
Doppler Shift is 10 KHz

Russian callsigns: RS0ISS, RZ3DZR
USA callsign: NA1SS
Packet station mailbox callsign: RS0ISS-11
Packet station keyboard callsign: RS0ISS-3
Digipeater callsign: ARISS

The ISS Fan Club Webpage < http://www.issfanclub.com > reports that the
Digi-
peater is active as of Nov 14th, 2005 at 0207UTC.

The ISS daily crew schedule can be found at:
http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is NOT
translated from Russian and posted.

More information is available at:
http://www.rac.ca/ariss
http://spaceflight.nasa.gov/station/reference/radio/
http://www.marexmg.org/fileshtml/unprotopage.html
http://www.issfanclub.com
http://oscar.dcarr.org/
[11132005]
NNNN
/EX

SB SAT @ AMSAT <W8ISS $ANS-317.S2
WSR 317 Part 2 11/13/2005

AMSAT NEWS SERVICE BULLETIN 317.S2 FROM AMSAT HQ
SILVER SPRING, MD, November 13, 2005
TO ALL RADIO AMATEURS
BID: $ANS-317.S2

PCSAT2 ?0-??
Catalog Number:
Launch Date: August 1, 2005

Status: Operational

PCSAT2 was installed on the exterior of the International Space
Station and was activated on August 3, 2005.

PCSAT2 CAPABILITIES: PCSAT2 is attached to the ISS and so its operations
must be in cooperation with the ARISS communications suite to minimize
any mutual interference and to coordinate activities. Here are the
capabilities of the PCSAT2 and ARISS payloads:

PCSAT SYSTEM A:

435.275 PCSAT2 DOWNLINK 1200 baud packet with uplink on 145.825
435.275 PCSAT2 DOWNLINK Occasional user PSK-31 continuous downlink
145.825 PCSAT2 DOWNLINK 1200 baud packet

PCSAT SYSTEM B:

437.975 PCSAT2 DOWNLINK periodic Solar Cell data and PCSAT2 telemetry at
9600 baud
437.975 PCSAT2 DOWNLINK TNC-B command downlink at 1200 baud
437.975 PCSAT2 DOWNLINK User Voice Repeater with VHF uplink
437.975 PCSAT2 DOWNLINK Packet digipeater with VHF uplink

It looks like PCSAT2 can best contribute at this time by operating in
PSK-31 mode for the near future. This is a very exciting new
transponder mode which solves the congestion problem on FM repeaters
by letting multiple stations all communicate at the same time.

PSK-31 users are welcome to try out the new PCSAT2 PSK-31 transponder
on ISS with an uplink on 29.402 +/- 1 KHz and downlink on 435.275 +/-
Doppler using FM.

The FM downlink lets everyone operate full duplex and everyone to see
the same view of the passband as everyone else. THus you can see
exactly
what your signal looks like to everyone else.

Help Wanted:

Here is your chance to become a viable part of the Amateur
Satellite Community.

We are looking for a volunteer satellite packet
station in Hawaii that is interested in helping with
telemetry and sat-gating of PCSAT2 and

ARISS packets. Requirements are:

1) General familiarity with packet
2) TNC connected to a cross band radio that
can RX on UHF and TX on VHF.
3) modest UHF beam and rotator system.

Contact WB4APR for more information.

Packets seen from PCSAT2 can be reviewed at:
http://www.findu.com/cgi-bin/pcsat2.cgi

A screen shot of both the 9600 bps and 1200 bps decoded data
as seen by Simon, 9W2QC, can be seen at:
http://www.9w2qc.net/pcsat2/

More information on PCSAT2 can be found at:
http://web.usna.navy.mil/~bruninga/pcsat2.html

[ANS-WSR thanks Bob, WB4APR and the U.S. Naval Academy Satellite Lab for
the aboveinformation.]

[08282005}
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - ON
FM REPEATER - V/S

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
Analog voice uplink: 145.880 MHz FM
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

This from the AO-51 Command Team:

14 Nov
FM Repeater, V/S
Uplink: 145.920 mhz FM, 67hz PL Tone
Downlink 2401.200 mhz FM

21 Nov
FM Repeater, V/U

Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital

5 Dec
FM Repeater, L/U
Uplink: 1268.700 mhz FM
Downlink 435.300 mhz FM

8 Dec (Wed Night)
9k6 Digital, V/U, High Power, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital

12 Dec
FM Repeater, V/S
Uplink: 145.920 mhz FM, No PL Tone
Downlink 2401.200 mhz FM

19 Dec
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital
[ANS-WSR thanks Mike Kingery, KE4AZN for the above information]
[11132005]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Non-Operational?????

Uplink/downlink: 145.827 MHz 1200 baud AX.25 AFSK via W3ADO-1
Aux/Uplink: 435.250 MHz 9600 baud via PCSAT-2 (off)
APRS Downlink: 144.390 MHz (Region 2)

PCSat is a 1200-baud APRS digipeater designed for use by stations using
hand-held or mobile transceivers. Downlinks feed a central web site at:
http://pcsat.aprs.org

The APRS-equipped PCSat was built by midshipmen from the U.S. Naval
Academy under the guidance of Bob Bruninga, WB4APR.
[07242005]
=====
CUTE-1
Catalog number: 27844
Launched: June 30,2003

Status: Operational

Uplink: ?
Downlink: 436.8375 CW
437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)
Cliff, K7RR reports:
In the latest Weekly Satellite Report, CUTE 1, #27844 is listed as
OPERATIONAL?
Indeed it is very operational as a CUBESAT sending CW telemetry on
436.8345 MHz. At the July 7 2005, 23:45:20 pass over the Western USA:
CUTE 1 6B A4 xx 7F D7 66A8 4702 FF FF7C 65
CUTE 1 6C A6 59 80 D9 66A8 4702 FF FE7C B6

The June 30th KEPS were within ten seconds of AOS and LOS. It is an very
good object to practice tracking as the orbit and transmitter power are
similar to proposed CUBESATS awaiting launch this December. As a check
for Doppler correction, the lack of change in tone is an excellent
indicator.

CUTE 1 is a Japanese (Tokyo Institute of Technology) one kilogram
nanosatellite that was launched by a Rokot rocket from Plesetsk at
14:15 UT on 30 June 2003. It carries a 100 mW beacon at 436.8375 MHz.
Initial orbital parameters were period 101.4 min, apogee 831 km, perigee
819 km, and inclination 98.7?.

For further info about CUTE-1 goto:
http://lss.mes.titech.ac.jp/ssp/cubesat/operation/Schedule_e.html

[ANS WSR wishes to thank Cliff, K7RR, for this week's information]
[07242005]
=====
GO-32 TECHSAT-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
(435.325 n/a - temperature problems)
Uplinks: 145.850, 145.890, 145.930 FM
1269.700, 1269.800, 1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[03132005]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink: 145.850 or 145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz
Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[05152005]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for
APRS users.

Uplink: 145.90 145.92 145.94 145.96 MHz FM
(using 1200-baud Manchester FSK)
Downlink: 437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon: 2401.1428 MHz
Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

A WOD collection of current graphics along with general information
and telemetry samples can be found at:
http://www.telecable.es/personales/ea1bcu
[05092004]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational?

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK).
approx. 10 days ON, 10 days OFF
Mode-S Beacon: 2401.500 MHz. ... OFF
UHFBeacon: 435.025 MHz. ... OFF

During the period 24 September to 25 October 2005 the VHF beacon on
145.826MHz resumed transmissions, as expected, on 30 September, sometime
between 06:05 and 06:42 UTC passes. Reasonable signals were also
captured on the 17:44 pass, later that day. However by the 16:49 UTC
pass on 02 October, the beacon had switched OFF. Transmissions resumed
on 21 October, and should continue until around 31 October.

The on-board clock continues to show a very large error. Currently it is
19.2394 days slow, having lost six hours while the beacon was last OFF,
ie. between 02 October and 21 October. When the beacon is ON, the clock

is stable to within a few seconds.

All the analogue telemetry channels, 0 to 59 are zero, ie they have failed. The status channels 60 to 67 are still working.

The eclipses have now ended, and the satellite should be in continuous sunlight for the remainder of this year, and well into next year. This should help the satellite to continue transmitting, although continuous sunlight can cause problems due to excessive temperatures.

The watchdog timer appears to be operating on the 20 day cycle, ie. approximately ten days ON followed by 10 days OFF. It appears to be uneffected by problems of the on-board clock. However, poor solar attitude, and battery problems, may be combining to produce a low line voltage. This causes the beacon to switch OFF premeaturely, and resets the watchdog timer cycle.

The Beacon frequencies are -
VHF 145.826 MHz. AFSK FM ASCII Telemetry
UHF 435.025 MHz. OFF
S-band 2401.5 MHz. OFF

Listeners to OSCAR-11 may be interested in visiting my website which contains an archive of news & telemetry data. It also contains details about using a soundcard or hardware demodulators for data capture. There is software for capturing data, and decoding ASCII telemetry. The URL is
www.users.zetnet.co.uk/clivew/

If you place this bulletin on a terrestrial packet network, please use the bulletin identifier $BID:U2RPT114.CWV, to prevent duplication.

[ANS thanks Clive G3CWV for the above information]

More information on UO-11 OSCAR-11 can be found at:
http://www.users.zetnet.co.uk/clivew/

MPEG3 files can be found here at Mineo, JE9PEL website:
http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm

[10302005]
NNNN
/EX

SB SAT @ AMSAT <W8ISS $ANS-317.S3
WSR 317 Part 3 11/13/2005

AMSAT NEWS SERVICE BULLETIN 317.S3 FROM AMSAT HQ
SILVER SPRING, MD, NOVENBER 13, 2005
TO ALL RADIO AMATEURS
BID: $ANS-317.S3

THE FOLLOWING ARE IN ORBIT BUT ARE
NON-OPERATIONAL AT THIS TIME:

POSAT-1 PO-28
Catalog Number: 22829
Launched : September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 435.250 MHz
435.275 MHz

Uplink: 145.925 MHz
145.975 MHz

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

PO-28 (POSAT-1), Portugal's first satellite, launched 12 years ago,will be
turned over to Amateur Radio use in the very near future. That was the word
July 30 from AMSAT-UK Secretary Jim Heck, G3WGM, during the AMSAT-UK Internat-
ional Space Colloquium in Guildford, England.

Launched September 25, 1993, the satellite operated as a packet store-and-for-
ward BBS (9600 baud FM FSK) on Amateur Radio frequencies for several weeks in
early 1994. Over the years, PO-28's primary usage has been commercial,
although plans have called for eventually shifting its operation to ham radio
use. G3WGM reports that following lengthy negotiations it has been agreed that
the satellite can be switched permanently to amateur frequencies. The change-
over is expected to take a couple of weeks.

The Portuguese satellite was built at the University of Surrey as part of a
collaborative satellite technology program that involved industry and academe.
Uplink frequencies will be 145.925 and 145.975 MHz. Downlink frequencies will
be 435.250 and 435.275 MHz. More information on PO-28 is on the AMSAT Web site

http://www.amsat.org/amsat/sats/n7hpr/po28.html.

Uplink Frequencies: 145.925 and 145.975 MHz
Downlink Frequencies: 435.250 and 435.275 MHz

Orbit: 822 x 800 km, 98.6 deg inclined, sun-synchronous.

Transponder capabilities include FM repeater and 38k4 data. If you want
to hear how loud this satellite is, listen on 429.950 until the change
back to amateur radio service.

Keplerian elements for PO-28 are currently contained in the AMSAT keps bull-
etins and at Celestrak in amateur.txt using the name "POSAT". Users of Space
Track should query the NORAD Satellite ID number 22829. The name listed by
Space Track is "EYESAT A".

More information of POSAT-1 can be found at:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
http://www.amsat.org/amsat/sats/n7hpr/po28.html
[ANS wishes to thank Duane Naugle, KO6BT, for this week's update.]
[11062005]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon: 145.810 MHz (unmodulated carrier)

AO-10 has been locked into a Mode-B, 70-cm uplink and
2-meter downlink for several years.

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Non-operational

Uplink: 145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink: 435.812 MHz SSB
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Alberto E. Zagni - I2KBD reports on 02/13/05
The spacecraft is in MBL (safe mode) and is trasmitting just 6 channels
of telemetry. Temperatures and voltage are nominal, but there seems to
be a problem with the onboard receiver, refusing to accept commands.
The spacecraft was launched in 1993, thus nearing 12 years in orbit...

Best regards
Alberto E. Zagni - I2KBD
ITAMSAT Mission Director

More information of IO-26 can be found at:

http://joshua.micronet.it/english/itamsat/itamsathome.html
http://www.amsat.org/amsat/sats/n7hpr/io26.html
www.itamsat.org

[02132005]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon: 29.408 MHz
Robot: 29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB
Beacon: 145.860 MHz
Robot: 145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439

Launch Date: December 26, 1994

Status: Non-operational?

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB
Beacon: 29.352 MHz (intermittent)
SSB meeting frequency: 29.380 MHz (unofficial)

John, KD6PAG reports on June 16, 2004 to ANS:
RS-15 beacon seemed to be back in the mode where it's a tone about 5
seconds off and then 5 seconds on this morning.

ANS is looking for more confirmations of RS-15 coming back.

[ANS thanks John, KD6PAG for RS-15 information]
[06202004]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplink: 145.84 145.86 145.88 145.90 MHz FM
(using 1200-baud Manchester FSK)
CW downlink: 437.125 MHz
Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)
Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM
Broadcast Callsign: HLO1-11
BBS: HLO1-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a
non-operational status.
[05092004]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM (9600-baud FSK)
Downlink: 436.500 MHz FM
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink frequency (listed on the PanSat web site) 436.500 MHz

The satellite is not available for general uplink transmissions.

The Naval Postgraduate School developed PanSat. At the time of
launch, PanSat spread-spectrum digital transponders were to
be available to Amateur Radio operators along with software to utilize
this technology.

The satellite is still operating, however, the spread spectrum packet
radio portion never took place. The spacecraft is now beyond it's
initial 2-year mission life, but telemetry records are still being
downloaded.

For more information, visit the official PanSat web site at:
http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS has no further information]
[05232004]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlink: 437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA
web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplink V-band 145.840 - 145.990 MHz CW/LSB
U-band 435.550 - 435.800 MHz CW/LSB
L1-band 1269.250 - 1269.500 MHz CW/LSB
L2-band 1268.325 - 1268.575 MHz CW/LSB
S1-band 2400.350 - 2400.600 MHz CW/LSB
Downlink: S2-band 2401.225 - 2401.475 MHz CW/USB
K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon: 2401.323, 24,048.035
[05232004]

SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational
Downlink: 437.075 MHz
Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz
Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
callsign KE6QMD, as per the user service agreement located at the
following
URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Semi-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK

(optional voice message)
Broadcast callsign: DP0AIS

AO-49 (SAFIR-M) is a German amateur radio payload onboard the small German
scientific satellite "RUBIN-2".

AO-49 was built by the German amateur radio association "AATiS e.V." (German
acronym for "Arbeitskreis Amateurfunk und Telekommunikation in der Schule",
which means: 'working group for amateur radio and telecommunications in
schools'). AO-49 is designed as a "store and broadcast" system for APRS based
messages, dedicated for the use of schools in combination with the existing
WX-Net and planned buoy experiments in Germany.

No transmissions detected since the 1st of February 2003! It appears AO-49 is
not properly aligned to illuminate the solar panels. This should end soon. Due
to its orbit, AO-49 will be in a phase without eclipses until 13Feb03.

Martin DG8UAU has written a small software program "SAFIR-M Decoder" to allow
decoding of the received DATA0 frames. It is available at:
http://amend.gmxhome.de in the section Aktuelles.

Details on AO-49 (SAFIR-M) can be found at:
http://amend.gmxhome.de

Information about AATiS e.V. is available at:
http://www.aatis.de
[11132005]
NNNN
/EX

SB SAT @ AMSAT <W8ISS $ANS-317.S4
WSR 317 Part 4 11/13/2005

AMSAT NEWS SERVICE BULLETIN 317.S4 FROM AMSAT HQ
SILVER SPRING, MD, NOVEMBER 13,2005
TO ALL RADIO AMATEURS
BID: $ANS-317.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE
PROPOSED FOR LAUNCH AT THIS TIME:

UCISAT ?O-??
Catalog number:
Proposed Launch Date: October 31, 2005

Status: Under Construction

Downlink: Submission in Progress
Uplink: Submission in Progress
Callsign: Submission in Progress

This from Matt Bennett, KF6RTB, UCISAT Communications Team Member:

Our website is www.ucisat.net .This is a new website, however, and doesn't have the "Status" section active yet. Because of the growing interest in our project, I'll push our webmaster to create updates (hopefully) on a week-to-week basis. For now, the current status of the mission is as follows:

-Expected Launch Date: October 31st, 2005
-Frequency Allocation: Submission in Progress
-Construction Status: Sub-Assembly
[WSR to thank Matt Bennett, KF6RTB, for this week's report.]
[01302005]
=====
SSETI ?O-??
Catalog Number:
Launch Date: October 27, 2005

Status: ????

The SSETI Express satellite launched at 06:52 UTC on Thursday, 27 October 2005 on board a Kosmos 3M launcher. One hundred and three minutes later, exactly on schedule, the first signals were heard form the groundstation in Aalborg, and two-way communication was established. In addition to several successful communication sessions with SSETI Express, two of the Cubesat passengers, UWE-1 and Xi-V, have been heard by their groundstations.

An official release from ESA stated, "22:20 CEST SSETI Express went into a safe mode due to an undervoltage caused by battery charging problems. The operations team is working actively to resume nominal operations of the satellite and is receiving tremendous help in the process from the amateur radio community. At the time of the anomaly many mission milestones had already successfully
been met."

Graham, UA/G3VZV reports, "that it seems that no reliable reports of any signals have been received and the teams are reviewing all the telemetry already received to fully understand what is happening on board.Initial review suggests that there is a significant chance that the power supply problem may correct itself." Graham also advises that the command station in Aalborg is planning to try to try a blind command of the satellite into S band on mode - maybe on a Sunday am pass at 10:30 UTC.

As the statement above makes clear, ESA and the SSETI Association greatly value the input that amateur operators are providing and would ask amateurs around the world to continue to check for signals on 437.250MHz at the appropriate pass times. These signals may be short bursts of 9k6 data every 18 secs or bursts of pulse telemetry every 30 secs. Please understand that the pulse beacon decoder can produce

spurious results on plain noise if over driven!

Anyone hearing anything that matches the above detail is requested to please email details to missioncontrol@sseti.org

The type of the first transmissions will depend on the state of the battery.

In Nominal mode - a sub 1 second burst of AX25 9k6 FSK telemetry every 18 seconds on the downlink frequency of 437.250 MHz.

In Recovery or Safe mode - simple on/off telemetry comprising 16 x 100 msec carrier pulses. This telemetry is repeated every 30 seconds in Safe Mode and every 2 minutes when in Recovery Mode.

The satellite will transmit at a power of 3 watts.

oN

A daily report of the launch campaign is being maintained at http://sseti.gte.tuwien.ac.at/express/mop/index.php?uri=news.html This mission operations site is completely up-to-date regarding Kepler TLEs and other LEOP "Launch and Early Operations Phase" details.

The SERACC software, needed to decode and submit the received data to the SSETI database, together with some audio files containing recorded 9k6 signals to experiment with is also now available

The ESA website about SSETI Express is at:
http://www.esa.int/SPECIALS/sseti_express/SEMARJ7X9DE_0.html

The latest version of the SSETI Express handbook can be downloaded free of charge from the AMSAT-UK website at:
http://www.uk.amsat.org/

[ANS thanks Graham, UA/G3VZV and Trevor, M5AKA for the above]

More SSETI Links at:

SpaceDaily has a report about SSETI at:
http://www.spacedaily.com/news/internet-04zzzu.html

You can find more info about SSETI at:
http://sseti.gte.tuwien.ac.at/WSW4/

Latest news about SSETI can be found at:
http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php

Look at the website for the SSETI Express webcam
http://sseti.gte.tuwien.ac.at/WSW4/webcam.htm

[10302005]
=====
PHASE 3E ?O-??
Catalog Number:
Proposed Launch Date: Early 2006

Status: Under Construction

For the latest project status update please visit the AMSAT-DL
P3-E web page:
http://www.amsat-dl.org/p3e/

[ANS-WSR wishes to thank William Leijenaar, PE1RAH for this week's
report]
[10022005]
=====
CP1 ?o-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N6CP
Proposed Transmit Frequency: 436.845
[03272005]
=====
CP2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.325
[03272005]
=====
HAUSAT1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: D90HP
Proposed Transmit Frequency: 437.465
[03272005]
=====
ICE Cube 1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: W2CXM
Proposed Transmit Frequency: 437.305
[03272005]
=====
ICE Cube 2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N2VR
Proposed Transmit Frequency: 437.425
[03272005]
=====
ION ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.505
[03272005]
=====
KUTEsat ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: KC0RMW
Proposed Transmit Frequency: 437.385
[03272005]
=====
MEROPE ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: K7MSU-1
Proposed Transmit Frequency: 145.980
[03272005]
=====
nCUBE1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
2407.25
[03272005]
=====
RINCON ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
437.345
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]

=====
SEEDS ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: JQ1YGU
Proposed Transmit Frequency: 437.485
[03272005]
=====
Mea Huaka ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.405
[03272005]
=====
SUITSAT ?O-??
Catalog Number:
Proposed Release Date: December 8th, 2005

Proposed Callsign: RS0RS ?
Proposed Transmit Frequency: 145.990

This from Miles, WF1F:
At the present time there are tentative plans to have a Space Walk (EVA) tak-
ing place from ISS sometime around December 8, 2005. It is possible that dur-
ing this Space Walk, the ISS crew may Hand launch the ARISS SuitSat project
during that EVA mission. Again, all date are subject to last minute changes.
Please Keep monitoring the ARISS and AMSAT web pages for more updates.

The SuitSat project is a free floating Unmanned satellite that will be running
on Batteries Only! The life span of the project will be limited to the power
in the batteries. SuitSat may last as little as 1 week or as long as 6 weeks.
So it is very important for you to get your satellite monitoring station ready
now. You should not wait for the Official activation date, because you may
miss the opportunity to hear the new bird.

I will keep posting updated links for the SuitSat project as they become
available.

This from Frank H. Bauer, KA3HDO:

Yes, we have set the SuitSat-1 downlink to be the same as the Packet uplink.
The ARISS/Human Spaceflight team have a very limited set of frequencies in the
2 meter OSCAR sub-band (145.80-146 MHz). 145.99 is one of them.

As Miles Mann, WF1F, described, we will be reconfiguring the Kenwood D700E
from packet mode. Our tentative plan is to set the D700 into a repeater mode
with that will enable the ISS radio to repeat the Suitsat audio on 70 cm,
specifically, 437.80 MHz.

All hams are requested to refrain from uplinking packet (or voice) on 145.99
during Suitsat operations. This will allow you and your local neighbors to
better hear the SuitSat downlink. SuitSat will only be operational for a few
days.....we all would like to get the most of its operations. So please due
your best to abide by this plan.

We will continue to provide late-breaking information on SuitSat plans on the
following web sites. Please check them often. And get your stations ready to
copy the audio, voice telemetry, and SSTV picture.

http://www.amsat.org

http://www.rac.ca/ariss

A video of the progress of Suitsat can be found at the following URL:
http://www.amsat.org/amsat-new/information/videoNews.php
[11132005]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

414. TESLA BOOK

Newsgroup: rec.radio.amateur.space
Date: 2005-11-15 14:25:08 UTC
From: ADVENTURER99 <lostcontinentlib@yahoo.com>
Message-ID: <d9fa2b9c7c2e18fdcfaa74c4b18eb20c@localhost.talkaboutradio.com>
Source record: 1876

NIKOLA TESLA is a subject quite popular with many
people. There is much speculation as to the
source of his knowledge and vision. Some even ask if
he could have been an alien!
SESH HERI is the author of a new novel featuring
historical events from Tesla's life, and how these
events could have led to an adventure on Mars.
Certainly, this is material of interest to your
listeners fascinated by the great scientist and the
mysterious Red Planet.
Heri has incorporated his studies on Tesla and a
personal fascination with the Mars theories of RICHARD
HOAGLAND into an historical 'What if?' novel based on
much actual research conducted on these subjects.
Heri can discuss the great scientific genius and
Martian enigmas with the best of them.
Sesh Heri has studied geomorphology for over 20 years and has developed
a revolutionary theory that harmoniously confirms and clarifies the
tetrahedral geometry theories of RICHARD HOAGLAND -- whom HERI greatly
respects.
Heri's conclusion is that the Earth's present
geographical axis was artificially induced -- in
recent geological time -- with extreme precision.
Heri concludes that the shape of the Earth reveals
many things, among them is evidence of pole shift.
Heri also concludes that the original orientation of
the Earth put Giza at 19.5 degrees latitude.

Many people have said for years that Tesla's life and
works would make a great science fiction novel. Well,
Heri's novel WONDER OF THE WORLDS is that novel. In
fact -- it is the essential NIKOLA TESLA novel.
Heri's revolutionary theory of geomorphology is
interwoven through WONDER OF THE WORLDS.

Heri is prepared to present and discuss his theory,
especially how it relates to and supports the theories
of RICHARD HOAGLAND -- whom HERI would welcome a
dialogue with on these subjects.

The novel WONDER OF THE WORLDS, in which Heri has
incorporated his revolutionary theory on
geomorphology, features Tesla being guided by a secret
society that allows him access to a mysterious book
containing secret truths -- truths that eventually

lead the great Tesla to Mars.

Jim McCanney, in an excerpt relating to his book ATLANTIS TO TESLA on his website, comments that Tesla was very possibly guided by such a secret society-- a secret society that may have had intimate knowledge of the much discussed Kolbrin Bible.

As you are beginning to see, WONDER OF THE WORLDS is more than just another novel exploiting fascinating mysteries. WONDER OF THE WORLDS incorporates interesting and enigmatic anomalies and questions of our world and history -- and serves as an introduction to theories and evidences of the most impactful mysteries of our times.

SESH HERI is more than a novelist. Twain and Tesla did, indeed, meet. The technology of WONDER OF THE WORLDS existed either in the labs of TESLA or in his designs. SESH HERI has spent half a lifetime researching and studying the principles and ideas he has merely touched upon in his masterful adventure tale -- principles and ideas he is prepared to discuss in detail.

And yet, I find much resistance when promoting this book. Therefore, I am reaching out to the people in a grass roots campaign to spread the word.

If there is anyone interested, please check out the following links:

http://www.amazon.com/exec/obidos/tg/detail/-/0972747281/qid=1131999092/sr=8-1/ref=sr_8_xs_ap_i1_xgl14/104-2797014-7009543?v=glance&s=books&n=507846

Amazon says the book isn't available yet, but it is.

http://www.lostcontinentlibrary.com go to the "Catalogue" page

http://groups.yahoo.com/group/wonderoftheworlds/?yguid=163347351

Thank you.

415. IC910H-data Communication

Newsgroup: rec.radio.amateur.space
Date: 2005-11-20 20:11:12 UTC
From: thoppay <pthoppay@gmail.com>
Message-ID: <1132517472.239959.5680@g47g2000cwa.googlegroups.com>
Source record: 1879

Hi All,

I need basic material on how to use IC910H for data communication. If anybody out there know information please help me on this.

Thanks a lot in advance.

Regards,
Prakash

416. WSR-324 AMSAT Weekly Satellite Report

Newsgroup: rec.radio.amateur.space
Date: 2005-11-23 14:59:17 UTC
From: JoAnne Maenpaa <wb9jej_no-spam@earthlink.net>
Message-ID: <9t%gf.2612$aA2.1618@newsread2.news.atl.earthlink.net>
Source record: 1880

```
This report is organized into 4 parts.
Part 1 - operational analog amateur satellites.
Part 2 - operational digital amateur satellites.
Part 3 - non - operational satellites
Part 4 - proposed satellites

SB SAT @ AMSAT <W8ISS $ANS-324.S1
WSR 324 Part 1 11/20/2005

AMSAT NEWS SERVICE BULLETIN 324.S1 FROM AMSAT HQ
SILVER SPRING, MD, November 20, 2005
TO ALL RADIO AMATEURS
BID: $ANS-324.S1

VO-52 HAMSAT
Catalog Number: 28650
Launch Date: May 05,2005

Status: Testing
Current Mode: U/V - Dutch Transponder

Proposed frequencies:
-------------------
Indian Transponder:
Uplink : 435.220 MHz to 435.280 MHz LSB/CW
Downlink: 145.870 MHz to 145.930 MHz USB/CW
Beacom : 145.859330 MHZ CW

Dutch Transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacon : 145.860MHz 12WPM with CW message
[11202005]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - V/U 9k6
VOICE REPEATER - V/U FM

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
Analog voice uplink: 145.880 MHZ FM
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone
```

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

This from the AO-51 Command team:

21 Nov
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital

5 Dec
FM Repeater, L/U
Uplink: 1268.700 mhz FM
Downlink 435.300 mhz FM

8 Dec (Wed Night)
9k6 Digital, V/U, High Power, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital

12 Dec
FM Repeater, V/S
Uplink: 145.920 mhz FM, No PL Tone
Downlink 2401.200 mhz FM

19 Dec
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital

[ANS-WSR thanks Mike Kingery, KE4AZN for the above information]
[11202005]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz (67.0 Hz PL tone) (See below for operating
procedures)
Downlink: 436.795 MHz

There have been unconfirmed reports on the amsat-bb remailer that SO-50 has shifted downlink frequency as much as 5khz up. This both from Europe.

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary)

1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on
and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.
[09122004]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplink: 145.850 145.870 145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

John, N4QWL reports on July 16th, 2005:
Last evening I had a AOS to LOS qso with WI2W. FO-29 came up at 01:17z here in
FM07 and I found WI2W and we chatted until 01:33z. The satellite was at 2 degrees elevation when I finally heard him start to crackle a bit. What a great QSO! To think that I watched this bird launch back in 1996 and it is still working so well is a real thrill. I believe I still have the video. I might just look for it and watch it again. Boy do I love this satellite stuff!
Look for you all up there.

Please send the reception reports to lab2 'at' jarl.or.jp.
Please use the subject line: 'FO-29 reception report'.

Mineo, JE9PEL, has an FO-29 satellite telemetry analysis program that will automatically analyze all digital telemetry from the satellite (such as current, voltage and temperature). FO29CWTE is available at:
http://www.ne.jp/asahi/hamradio/je9pel/
[ANS-WSR wishes to thanks John, N4QWL for this week's report]
[11132005]
=====
AO-27 AMRAD

Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

The latest information on AO-27 from control operator Michael Wyrick,
N3UC (former N4USI), can be found at:
http://www.ao27.org

An AO-27 question-and-answer page is available on the AMSAT-NA web
site, with updates by Ray, W2RS. The URL is:
http://www.amsat.org/amsat/intro/ao27faq.html

[ANS-WSR thanks John, K6YK, for this week's AO-27 report]
[11132005]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Semi-operational in sunlight.
Return to active status: June 21,2002

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A
145.975 to 145.925 MHz CW/USB Mode B
Beacon: 29.502 MHz, 145.972 MHz, 435.1 MHz, 2304.1 MHz

Emily, W0EEC has created a website to allow the users of AO-7 to record
contacts, observations and use of the satellite more effectively at:
http://www.emilyshouse.com/experthams/ao7/main.php
This includes the ability to log contacts.

Tim, K3TZ has written a program to decode AO-07 telemetry.
The program can be downloaded at:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

For more AO-7 info:
http://www.amsat.org/amsat/sats/n7hpr/ao7.html
[11132005]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: DIGIPEATER
Digipeater: ACTIVE

The current Expedition 12 crew is:
Commander: William McArthur - KC5ACR
Flight Engineer: Valery Tokarev - (no call)

Worldwide packet uplink: 145.990 MHz FM
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM
Doppler Shift is 10 KHz

Russian callsigns: RS0ISS, RZ3DZR
USA callsign: NA1SS
Packet station mailbox callsign: RS0ISS-11
Packet station keyboard callsign: RS0ISS-3
Digipeater callsign: ARISS

The ISS Fan Club Webpage < http://www.issfanclub.com > reports that the
Digi-
peater is active as of Nov 14th, 2005 at 0207UTC.

The ISS daily crew schedule can be found at:
http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line
is NOT
translated from Russian and posted.

More information is available at:
http://www.rac.ca/ariss
http://spaceflight.nasa.gov/station/reference/radio/
http://www.marexmg.org/fileshtml/unprotopage.html
http://www.issfanclub.com
http://oscar.dcarr.org/
[11132005]
NNNN
/EX

SB SAT @ AMSAT <W8ISS $ANS-324.S2
WSR 324 Part 2 11/20/2005

AMSAT NEWS SERVICE BULLETIN 324.S2 FROM AMSAT HQ
SILVER SPRING, MD, November 20, 2005
TO ALL RADIO AMATEURS
BID: $ANS-324.S2

PCSAT2 ?0-??
Catalog Number:
Launch Date: August 1, 2005

Status: Operational

PCSAT2 was installed on the exterior of the International Space
Station and was activated on August 3, 2005.

PCSAT2 CAPABILITIES: PCSAT2 is attached to the ISS and so its operations must be in cooperation with the ARISS communications suite to minimize any mutual interference and to coordinate activities. Here are the capabilities of the PCSAT2 and ARISS payloads:

PCSAT SYSTEM A:

435.275 PCSAT2 DOWNLINK 1200 baud packet with uplink on 145.825
435.275 PCSAT2 DOWNLINK Occasional user PSK-31 continuous downlink
145.825 PCSAT2 DOWNLINK 1200 baud packet

PCSAT SYSTEM B:

437.975 PCSAT2 DOWNLINK periodic Solar Cell data and PCSAT2 telemetry at 9600 baud
437.975 PCSAT2 DOWNLINK TNC-B command downlink at 1200 baud
437.975 PCSAT2 DOWNLINK User Voice Repeater with VHF uplink
437.975 PCSAT2 DOWNLINK Packet digipeater with VHF uplink

It looks like PCSAT2 can best contribute at this time by operating in PSK-31 mode for the near future. This is a very exciting new transponder mode which solves the congestion problem on FM repeaters by letting multiple stations all communicate at the same time.

PSK-31 users are welcome to try out the new PCSAT2 PSK-31 transponder on ISS with an uplink on 29.402 +/- 1 KHz and downlink on 435.275 +/- Doppler using FM.

The FM downlink lets everyone operate full duplex and everyone to see the same view of the passband as everyone else. THus you can see exactly
what your signal looks like to everyone else.

Help Wanted:

Here is your chance to become a viable part of the Amateur Satellite Community.

We are looking for a volunteer satellite packet station in Hawaii that is interested in helping with telemetry and sat-gating of PCSAT2 and ARISS packets. Requirements are:

1) General familiarity with packet
2) TNC connected to a cross band radio that can RX on UHF and TX on VHF.
3) modest UHF beam and rotator system.

Contact WB4APR for more information.

Packets seen from PCSAT2 can be reviewed at:
http://www.findu.com/cgi-bin/pcsat2.cgi

A screen shot of both the 9600 bps and 1200 bps decoded data as seen by Simon, 9W2QC, can be seen at:

http://www.9w2qc.net/pcsat2/

More information on PCSAT2 can be found at:
http://web.usna.navy.mil/~bruninga/pcsat2.html

[ANS-WSR thanks Bob, WB4APR and the U.S. Naval Academy Satellite Lab for
the aboveinformation.]

[08282005}
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - V/U 9k6
VOICE REPEATER - V/U FM

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
Analog voice uplink: 145.880 MHZ FM
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

This from the AO-51 Command team:

21 Nov
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital

5 Dec
FM Repeater, L/U
Uplink: 1268.700 mhz FM
Downlink 435.300 mhz FM

8 Dec (Wed Night)
9k6 Digital, V/U, High Power, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital

12 Dec
FM Repeater, V/S

Uplink: 145.920 mhz FM, No PL Tone
Downlink 2401.200 mhz FM

19 Dec
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital
[ANS-WSR thanks Mike Kingery, KE4AZN for the above information]
[11202005]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Operational

Uplink/downlink: 145.827 MHz 1200 baud AX.25 AFSK via W3ADO-1
Aux/Uplink: 435.250 MHz 9600 baud via PCSAT-2 (off)
APRS Downlink: 144.390 MHz (Region 2)

PCSat is a 1200-baud APRS digipeater designed for use by stations using
hand-held or mobile transceivers. Downlinks feed a central web site at:
http://pcsat.aprs.org

The APRS-equipped PCSat was built by midshipmen from the U.S. Naval Academy
under the guidance of Bob Bruninga, WB4APR.
[11202005]
=====
CUTE-1
Catalog number: 27844
Launched: June 30,2003

Status: Operational

Uplink: ?
Downlink: 436.8375 CW
437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)
Cliff, K7RR reports:
In the latest Weekly Satellite Report, CUTE 1, #27844 is listed as
OPERATIONAL?
Indeed it is very operational as a CUBESAT sending CW telemetry on
436.8345 MHz. At the July 7 2005, 23:45:20 pass over the Western USA:
CUTE 1 6B A4 xx 7F D7 66A8 4702 FF FF7C 65
CUTE 1 6C A6 59 80 D9 66A8 4702 FF FE7C B6

The June 30th KEPS were within ten seconds of AOS and LOS. It is an very
good object to practice tracking as the orbit and transmitter power are
similar to proposed CUBESATS awaiting launch this December. As a check
for Doppler correction, the lack of change in tone is an excellent
indicator.

CUTE 1 is a Japanese (Tokyo Institute of Technology) one kilogram
nanosatellite that was launched by a Rokot rocket from Plesetsk at
14:15 UT on 30 June 2003. It carries a 100 mW beacon at 436.8375 MHz.
Initial orbital parameters were period 101.4 min, apogee 831 km, perigee
819 km, and inclination 98.7?.

For further info about CUTE-1 goto:
http://lss.mes.titech.ac.jp/ssp/cubesat/operation/Schedule_e.html

[ANS WSR wishes to thank Cliff, K7RR, for this week's information]
[07242005]
=====
GO-32 TECHSAT-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
(435.325 n/a - temperature problems)
Uplinks: 145.850, 145.890, 145.930 FM
1269.700, 1269.800, 1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

Jeff, KB2M, reports November 15th, 2005:
I might be wrong about this, but as I am the only one I see working GO-32
here goes. If you do a DIR request up on the 145.890 uplink the bird turns
on. Give it a try....

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[ANS-WSR wishes to thank Jeff, KB2M for this weeks report.]
[11202005]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for
APRS users.

Uplink: 145.90 145.92 145.94 145.96 MHz FM
(using 1200-baud Manchester FSK)
Downlink: 437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon: 2401.1428 MHz
Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

A WOD collection of current graphics along with general information
and telemetry samples can be found at:
http://www.telecable.es/personales/ea1bcu
[05092004]
=====

UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational?

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK).
approx. 10 days ON, 10 days OFF
Mode-S Beacon: 2401.500 MHz. ... OFF
UHFBeacon: 435.025 MHz. ... OFF

During the period 24 September to 25 October 2005 the VHF beacon on 145.826MHz resumed transmissions, as expected, on 30 September, sometime between 06:05 and 06:42 UTC passes. Reasonable signals were also captured on the 17:44 pass, later that day. However by the 16:49 UTC pass on 02 October, the beacon had switched OFF. Transmissions resumed on 21 October, and should continue until around 31 October.

The on-board clock continues to show a very large error. Currently it is 19.2394 days slow, having lost six hours while the beacon was last OFF, ie. between 02 October and 21 October. When the beacon is ON, the clock is stable to within a few seconds.

All the analogue telemetry channels, 0 to 59 are zero, ie they have failed. The status channels 60 to 67 are still working.

The eclipses have now ended, and the satellite should be in continuous sunlight for the remainder of this year, and well into next year. This should help the satellite to continue transmitting, although continuous sunlight can cause problems due to excessive temperatures.

The watchdog timer appears to be operating on the 20 day cycle, ie. approximately ten days ON followed by 10 days OFF. It appears to be uneffected by problems of the on-board clock. However, poor solar attitude, and battery problems, may be combining to produce a low line voltage. This causes the beacon to switch OFF premeaturely, and resets the watchdog timer cycle.

The Beacon frequencies are -
VHF 145.826 MHz. AFSK FM ASCII Telemetry
UHF 435.025 MHz. OFF
S-band 2401.5 MHz. OFF

Listeners to OSCAR-11 may be interested in visiting my website which contains
an archive of news & telemetry data. It also contains details about using a soundcard or hardware demodulators for data capture. There is software for capturing data, and decoding ASCII telemetry. The URL is:

www.users.zetnet.co.uk/clivew/

If you place this bulletin on a terrestrial packet network, please use the bulletin identifier $BID:U2RPT114.CWV, to prevent duplication.

More information on UO-11 OSCAR-11 can be found at:
http://www.users.zetnet.co.uk/clivew/

MPEG3 files can be found here at Mineo, JE9PEL website:
http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[ANS-WSR thanks Clive G3CWV for the above information]
[10302005]
NNNN
/EX

SB SAT @ AMSAT <W8ISS $ANS-324.S3
WSR 324 Part 3 11/20/2005

AMSAT NEWS SERVICE BULLETIN 324.S3 FROM AMSAT HQ
SILVER SPRING, MD, NOVENBER 20, 2005
TO ALL RADIO AMATEURS
BID: $ANS-324.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

SSETI ?O-??
Catalog Number:
Launch Date: October 27, 2005

Status: In orbit - being commissioned

A daily report of the launch campaign is being maintained at
http://sseti.gte.tuwien.ac.at/express/mop/index.php?uri=news.html
This mission operations site is completely up-to-date regarding Kepler TLEs
and other LEOP "Launch and Early Operations Phase" details.

The SERACC software, needed to decode and submit the received data to the
SSETI database, together with some audio files containing recorded 9k6
signal
to experiment with is also now available

The ESA website about SSETI Express is at:
http://www.esa.int/SPECIALS/sseti_express/SEMARJ7X9DE_0.html

The latest version of the SSETI Express handbook can be downloaded free
of charge from the AMSAT-UK website at:
http://www.uk.amsat.org/

[ANS-WSR thanks Graham, UA/G3VZV and Trevor, M5AKA for the above]

More SSETI Links at:

SpaceDaily has a report about SSETI at:
http://www.spacedaily.com/news/internet-04zzzu.html

You can find more info about SSETI at:
http://sseti.gte.tuwien.ac.at/WSW4/

Latest news about SSETI can be found at:
http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php

Look at the website for the SSETI Express webcam
http://sseti.gte.tuwien.ac.at/WSW4/webcam.htm
[11202005]
======
POSAT-1 PO-28
Catalog Number: 22829
Launched : September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 435.250 MHz
435.275 MHz

Uplink: 145.925 MHz
145.975 MHz

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

PO-28 (POSAT-1), Portugal's first satellite, launched 12 years ago,will be
turned over to Amateur Radio use in the very near future. That was the word
July 30 from AMSAT-UK Secretary Jim Heck, G3WGM, during the AMSAT-UK Internat-
ional Space Colloquium in Guildford, England.

Launched September 25, 1993, the satellite operated as a packet store-and-for-
ward BBS (9600 baud FM FSK) on Amateur Radio frequencies for several weeks in
early 1994. Over the years, PO-28's primary usage has been commercial,
although plans have called for eventually shifting its operation to ham radio
use. G3WGM reports that following lengthy negotiations it has been agreed that
the satellite can be switched permanently to amateur frequencies. The change-
over is expected to take a couple of weeks.

The Portuguese satellite was built at the University of Surrey as part of a
collaborative satellite technology program that involved industry and academe.
Uplink frequencies will be 145.925 and 145.975 MHz. Downlink frequencies will
be 435.250 and 435.275 MHz. More information on PO-28 is on the AMSAT
Web site

http://www.amsat.org/amsat/sats/n7hpr/po28.html.

Uplink Frequencies: 145.925 and 145.975 MHz
Downlink Frequencies: 435.250 and 435.275 MHz

Orbit: 822 x 800 km, 98.6 deg inclined, sun-synchronous.

Transponder capabilities include FM repeater and 38k4 data. If you want
to hear how loud this satellite is, listen on 429.950 until the change
back to amateur radio service.

Keplerian elements for PO-28 are currently contained in the AMSAT keps
bull-
etins and at Celestrak in amateur.txt using the name "POSAT". Users of
Space
Track should query the NORAD Satellite ID number 22829. The name listed
by
Space Track is "EYESAT A".

More information of POSAT-1 can be found at:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
http://www.amsat.org/amsat/sats/n7hpr/po28.html
[ANS-WSR wishes to thank Duane Naugle, KO6BT, for this week's update.]
[11062005]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon: 145.810 MHz (unmodulated carrier)

AO-10 has been locked into a Mode-B, 70-cm uplink and
2-meter downlink for several years.

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Non-operational

Uplink: 145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink: 435.812 MHz SSB
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Alberto E. Zagni - I2KBD reports on 02/13/05
The spacecraft is in MBL (safe mode) and is trasmitting just 6 channels
of telemetry. Temperatures and voltage are nominal, but there seems to
be a problem with the onboard receiver, refusing to accept commands.
The spacecraft was launched in 1993, thus nearing 12 years in orbit...

Best regards
Alberto E. Zagni - I2KBD
ITAMSAT Mission Director

More information of IO-26 can be found at:

http://joshua.micronet.it/english/itamsat/itamsathome.html
http://www.amsat.org/amsat/sats/n7hpr/io26.html
www.itamsat.org

[02132005]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon: 29.408 MHz
Robot: 29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB
Beacon: 145.860 MHz
Robot: 145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM
Broadcast Callsign: UOSAT5-11

BBS: UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB
Beacon: 29.352 MHz (intermittent)
SSB meeting frequency: 29.380 MHz (unofficial)

John, KD6PAG reports on June 16, 2004 to WSR:
RS-15 beacon seemed to be back in the mode where it's a tone about 5
seconds off and then 5 seconds on this morning.

WSR is looking for more confirmations of RS-15 coming back.

[ANS-WSR thanks John, KD6PAG for RS-15 information]
[06202004]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplink: 145.84 145.86 145.88 145.90 MHz FM
(using 1200-baud Manchester FSK)
CW downlink: 437.125 MHz
Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)
Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]
=====

KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM
Broadcast Callsign: HLO1-11
BBS: HLO1-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a
non-operational status.
[05092004]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM (9600-baud FSK)
Downlink: 436.500 MHz FM
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink frequency (listed on the PanSat web site) 436.500 MHz

The satellite is not available for general uplink transmissions.

The Naval Postgraduate School developed PanSat. At the time of
launch, PanSat spread-spectrum digital transponders were to
be available to Amateur Radio operators along with software to utilize
this technology.

The satellite is still operating, however, the spread spectrum packet
radio portion never took place. The spacecraft is now beyond it's
initial 2-year mission life, but telemetry records are still being
downloaded.

For more information, visit the official PanSat web site at:
http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS-WSR has no further information]
[05232004]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlink: 437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA
web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplink V-band 145.840 - 145.990 MHz CW/LSB
U-band 435.550 - 435.800 MHz CW/LSB
L1-band 1269.250 - 1269.500 MHz CW/LSB
L2-band 1268.325 - 1268.575 MHz CW/LSB

S1-band 2400.350 - 2400.600 MHz CW/LSB
Downlink: S2-band 2401.225 - 2401.475 MHz CW/USB
K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon: 2401.323, 24,048.035
[05232004]

SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational
Downlink: 437.075 MHz
Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz
Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
callsign KE6QMD, as per the user service agreement located at the
following
URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548

Launched: September 26, 2000

Status: Operational

Uplink: 145.850 or 145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz
Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[11202005]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Semi-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

AO-49 (SAFIR-M) is a German amateur radio payload onboard the small
German
scientific satellite "RUBIN-2".

AO-49 was built by the German amateur radio association "AATiS
e.V." (German
acronym for "Arbeitskreis Amateurfunk und Telekommunikation in der
Schule",
which means: 'working group for amateur radio and telecommunications in
schools'). AO-49 is designed as a "store and broadcast" system for APRS
based
messages, dedicated for the use of schools in combination with the
existing
WX-Net and planned buoy experiments in Germany.

No transmissions detected since the 1st of February 2003! It appears
AO-49 is
not properly aligned to illuminate the solar panels. This should end
soon. Due
to its orbit, AO-49 will be in a phase without eclipses until 13Feb03.

Martin DG8UAU has written a small software program "SAFIR-M Decoder" to
allow
decoding of the received DATA0 frames. It is available at:

http://amend.gmxhome.de in the section Aktuelles.

Details on AO-49 (SAFIR-M) can be found at:
http://amend.gmxhome.de

Information about AATiS e.V. is available at:
http://www.aatis.de
[11132005]
NNNN
/EX

SB SAT @ AMSAT <W8ISS $ANS-324.S4
WSR 324 Part 4 11/20/2005

AMSAT NEWS SERVICE BULLETIN 324.S4 FROM AMSAT HQ
SILVER SPRING, MD, NOVEMBER 20,2005
TO ALL RADIO AMATEURS
BID: $ANS-324.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE
PROPOSED FOR LAUNCH AT THIS TIME:

UCISAT ?O-??
Catalog number:
Proposed Launch Date: October 31, 2005

Status: Under Construction

Downlink: Submission in Progress
Uplink: Submission in Progress
Callsign: Submission in Progress

This from Matt Bennett, KF6RTB, UCISAT Communications Team Member:

Our website is www.ucisat.net .This is a new website, however, and
doesn't have the "Status" section active yet. Because of the growing
interest in our project, I'll push our webmaster to create updates
(hopefully) on a week-to-week basis. For now, the current status of
the mission is as follows:

-Expected Launch Date: October 31st, 2005
-Frequency Allocation: Submission in Progress
-Construction Status: Sub-Assembly
[ANS-WSR to thank Matt Bennett, KF6RTB, for this week's report.]
[01302005]
=====
PHASE 3E ?O-??
Catalog Number:
Proposed Launch Date: Early 2006

Status: Under Construction

For the latest project status update please visit the AMSAT-DL
P3-E web page:

http://www.amsat-dl.org/p3e/

[ANS-WSR wishes to thank William Leijenaar, PE1RAH for this week's report]
[10022005]
=====
CP1 ?o-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N6CP
Proposed Transmit Frequency: 436.845
[03272005]
=====
CP2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.325
[03272005]
=====
HAUSAT1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: D90HP
Proposed Transmit Frequency: 437.465
[03272005]
=====
ICE Cube 1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: W2CXM
Proposed Transmit Frequency: 437.305
[03272005]
=====
ICE Cube 2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N2VR
Proposed Transmit Frequency: 437.425
[03272005]
=====
ION ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.505
[03272005]

=====
KUTEsat ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: KC0RMW
Proposed Transmit Frequency: 437.385
[03272005]
=====
MEROPE ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: K7MSU-1
Proposed Transmit Frequency: 145.980
[03272005]
=====
nCUBE1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
2407.25
[03272005]
=====
RINCON ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
437.345
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SEEDS ?O-??

Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: JQ1YGU
Proposed Transmit Frequency: 437.485
[03272005]
=====
Mea Huaka ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.405
[03272005]
=====
SUITSAT ?O-??
Catalog Number:
Proposed Release Date: December 8th, 2005

Proposed Callsign: RS0RS ?
Proposed Transmit Frequency: 145.990

This from Miles, WF1F:
At the present time there are tentative plans to have a Space Walk (EVA) tak-
ing place from ISS sometime around December 8, 2005. It is possible that dur-
ing this Space Walk, the ISS crew may Hand launch the ARISS SuitSat project
during that EVA mission. Again, all date are subject to last minute changes.
Please Keep monitoring the ARISS and AMSAT web pages for more updates.

The SuitSat project is a free floating Unmanned satellite that will be running
on Batteries Only! The life span of the project will be limited to the power
in the batteries. SuitSat may last as little as 1 week or as long as 6 weeks.
So it is very important for you to get your satellite monitoring station ready
now. You should not wait for the Official activation date, because you may
miss the opportunity to hear the new bird.

I will keep posting updated links for the SuitSat project as they become
available.

This from Frank H. Bauer, KA3HDO:

Yes, we have set the SuitSat-1 downlink to be the same as the Packet uplink.
The ARISS/Human Spaceflight team have a very limited set of frequencies

in the
2 meter OSCAR sub-band (145.80-146 MHz). 145.99 is one of them.

As Miles Mann, WF1F, described, we will be reconfiguring the Kenwood
D700E
from packet mode. Our tentative plan is to set the D700 into a repeater
mode
with that will enable the ISS radio to repeat the Suitsat audio on 70
cm,
specifically, 437.80 MHz.

All hams are requested to refrain from uplinking packet (or voice) on
145.99
during Suitsat operations. This will allow you and your local neighbors
to
better hear the SuitSat downlink. SuitSat will only be operational for
a few
days.....we all would like to get the most of its operations. So please
due
your best to abide by this plan.

We will continue to provide late-breaking information on SuitSat plans
on the
following web sites. Please check them often. And get your stations
ready to
copy the audio, voice telemetry, and SSTV picture.

http://www.amsat.org

http://www.rac.ca/ariss

A video of the progress of Suitsat can be found at the following URL:
http://www.amsat.org/amsat-new/information/videoNews.php
[11132005]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live
radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz.
Pre-net operations start at 18:00 UTC, with current ANS bulletins trans-
mitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30
UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

417. ANS-324 AMSAT News Service Weekly Bulletin

Newsgroup: rec.radio.amateur.space
Date: 2005-11-23 14:59:19 UTC
From: JoAnne Maenpaa <wb9jej_no-spam@earthlink.net>
Message-ID: <bt%gf.2613$aA2.1465@newsread2.news.atl.earthlink.net>
Source record: 1881

AMSAT NEWS SERVICE
ANS-324

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* HAMSAT VO-52 Activates Dutch Transponder
* AATiS Team Announces RUBIN-5/SAFIR-S Activation
* DXpedition to FP Plans Satellite Activity
* SSETI Express - Statement by Sir Martin Sweeting G3YJO
* AMSAT Awards
* Italian School ISS Contact Photos On-Line
* Arianespace Celebrates Heavy Lifter Launch Success
* SuitSat Update

SB SAT @ AMSAT $ANS-324.01
HAMSAT VO-52 Activates Dutch Transponder

AMSAT News Service Bulletin 324.01
From AMSAT HQ SILVER SPRING, MD.
November 20, 2005
To All RADIO AMATEURS
BID: $ANS-324.01

Mani, VU2WMY, Secretary & Station-In-Charge of the Upagrah Amateur Radio Club at the ISRO Satellite Centre in Bangalore, India reports the command to switch on the Dutch transponder aboard HAMSAT VO-52 was successfully issued from India's ISRO Tracking Ranging and Command Network.

The Dutch transponder, designed and built by William, PE1RAH, began operation at 1034 hours on November 17 Indian Standard Time.

William said, "Tuning on 145.860 MHz I could clearly hear the CW beacon with the message I programmed in it. The CW beacon and transponder survived 6 months in space without any problems. I hope you all have lot of fun with it and can use it for your experiments and QSOs."

The first stations to operate via VO-52's Dutch transponder were Pop, VU2POP, Secretary Amsat India; Guru, VU2GUR; and Ramesh, VU2RMS; and Mani, VU2WMY. Reception reports have begun to be received from radio amateurs around the world as HAMSAT VO-52 comes in range.

Mani continued, "The second pass over India was also monitored with initial measurements and test results indicating normal performance. We look forward to feedback from the hams all over the world. Please post your reports on the Amsat-India web site http://www.amsat.in/hamsatreports.htm."

Frequencies used on HAMSAT's Dutch Transponder

Type: Linear Inverting transponder
Uplink frequency: 435.220 - 435.280 MHz,
Downlink frequency: 145.870 - 145.930 Mhz
Beacon: CW at 145.860 MHz

William will send a special QSL card for those who have a QSO with him via the Dutch transponder. This card was designed by Tasos, SV8YM, and features exclusive photos and information about HAMSAT.

[ANS thanks Mani, VU2WMY; Pop, VU2POP; AMSAT-India, and William, PE1RAH for the above information]

/EX

SB SAT @ AMSAT $ANS-324.02
AATiS Team Announces RUBIN-5/SAFIR-S Activation

AMSAT News Service Bulletin 324.02
From AMSAT HQ SILVER SPRING, MD.
November 20, 2005
To All RADIO AMATEURS
BID: $ANS-324.02

There are 2 amateur radio equipped payloads that are remain attached to the launch adapter that carried the SSETI mission into space. These are the Mozhayetz-5 (RS-25) and RUBIN-5/SAFIR-S payloads.

Unfortunately due to the failed release of RS-25, the power budget of a partially covered solar cell for RUBIN-5/SAFIR-S is low. The SAFIR S-band beacon is now enabled with a carrier frequency of 2401.900 MHz. The downlink-only beacon consists of a 10-15 second FM speech message followed by several transmissions of 9k6 FSK AX.25 packets.

Currently the SAFIR-S beacon is activated with the following schedule: minutes 10-20, minutes 30-40 and minutes 50-60. SAFIR-S is de-powered during the remaining hourly intervals.

Details regarding the status and a technical description are available on the AATiS-Sat Homepage: http://amend.gmxhome.de. This site is in

German language for the moment, but it is planned to add a description
in English. The satellite news on this site is bilingual.

Please e-mail reception reports DG6BCE@aatis.de

[ANS thanks Oliver, DG6BCE for the above information]

/EX

SB SAT @ AMSAT $ANS-324.03
DXpedition to FP Plans Satellite Activity

AMSAT News Service Bulletin 324.03
From AMSAT HQ SILVER SPRING, MD.
November 20, 2005
To All RADIO AMATEURS
BID: $ANS-324.03

Ian, K8MM, announced the DXpedition to the islands of St. Pierre and
Miquelon (prefix-FP) will include amateur radio satellite operation via
FO-29, VO-52, AO-07, AO-51 and SO-50. They will use CW and phone depend-
ing on how well they can hear the analog birds.

The FP DXpedition plans to be active from grid squares GN16 on St. Pierre
and GN17 on Miquelon from Nov 20 - 30. QSL with a SASE direct for any
FP/K8MM contacts via Ian's Call Book Address.

[ANS thanks Ian K8MM for the above information]

/EX

SB SAT @ AMSAT $ANS-324.04
SSETI Express - Statement by Sir Martin Sweeting G3YJO

AMSAT News Service Bulletin 324.04
From AMSAT HQ SILVER SPRING, MD.
November 20, 2005
To All RADIO AMATEURS
BID: $ANS-324.04

Professor Sir Martin Sweeting G3YJO, CEO of SSTL (Surrey Satellite
Technology Ltd) and Chair of AMSAT-UK has issued the following statement
regarding SSETI Express.

I am very sorry to learn of the problems with the SSETI power system
and I hope that it may yet recover at some time in the future so that
we will have the satisfaction of seeing all the hard work operational
in orbit.

Nevertheless, a major element of the project has been successful - that
is the training and inspiration of the students involved - and at least
signals were heard from SSETI in orbit during the first day!

It was very apparent from the European Space Agency (ESA) and SSETI
students that I met that they all greatly appreciated and admired the

specialist experience and maturity that the AMSAT-UK members involved brought to the project - this has done much to raise the credibility of AMSAT within the ESA community. Well done!

We at Surrey have been through difficult times with our early spacecraft and so can empathise with the disappointment - however, I also urge patience and perseverance as we recovered two of our satellites after several months hard work when everyone else had given them up as lost!

SSTL is also pleased to have been able to assist the SSETI project by arranging the launch on Cosmos that successfully placed the satellite in orbit.

Best 73,
Martin G3YJO

[ANS thanks AMSAT-UK for the above information]

/EX

SB SAT @ AMSAT $ANS-324.05
AMSAT Awards

AMSAT News Service Bulletin 324.05
From AMSAT HQ SILVER SPRING, MD.
November 20, 2005
To All RADIO AMATEURS
BID: $ANS-324.05

Bruce Paige, KK5DO, AMSAT Director Contests and Awards, announces this week, congratulations go out to all of the following.

Allen Kenny KK4EMK Satellite Communicators Club Award
Robert Tucker WA6MBL Satellite Communicators Club Award
Robert Lacey IV KF4GTA Satellite Communicators Club Award

Phillip Paulhus K1ICO 51 on 51 Award #39
Mitani Masaru JE4SMQ 51 on 51 Award #40
Jonathan Poulton W0CK 51 on 51 Award #41

To see all the awards visit http://www.amsat.org.

[ANS thanks Bruce, KK5DO for the above information]

/EX

SB SAT @ AMSAT $ANS-324.06
Italian School ISS Contact Photos On-Line

AMSAT News Service Bulletin 324.06
From AMSAT HQ SILVER SPRING, MD.
November 20, 2005
To All RADIO AMATEURS
BID: $ANS-324.06

Claudio, IK1SLD, invites radio amateurs to view the photos on-line
of the November 9 school contact between Bill McArthur and the Istituto
Comprensivo F. Negri of Casale Monferrato, Italy.

Images are stored in the gallery section at:
http://scuola.spaceonline.tv/mkportal/modules/coppermine/index.php

[ANS thanks Claudio, IK1SLD for the above information]

/EX

SB SAT @ AMSAT $ANS-324.07
Arianespace Celebrates Heavy Lifter Launch Success

AMSAT News Service Bulletin 324.07
From AMSAT HQ SILVER SPRING, MD.
November 20, 2005
To All RADIO AMATEURS
BID: $ANS-324.07

An Ariane-5 ECA heavy lift launcher blasted off from Kourou,
French Guiana on Wednesday, November 16 carrying a world record
8,000 kg of telecommunications satellites. The payload consisted
of DirecTV's Spaceway 2 satellite weighing 6,000 kg at lift-off,
and PT TelKom Indonesia's Telcom 2 satellite weighing nearly
2,000 kg at liftoff. The combined weight of the two satellites
on this launch was more than 8,000 kg, or 17,500 pounds.

Ariane-5 ECA rockets are designed to carry a payload of almost
10,000 kg (22,000 pounds). Arianespace has launched a total 11
satellites so far in 2005.

[ANS thanks SpaceDaily.com for the above information]

/EX

SB SAT @ AMSAT $ANS-324.08
SuitSat Update

AMSAT News Service Bulletin 324.08
From AMSAT HQ SILVER SPRING, MD.
November 20, 2005
To All RADIO AMATEURS
BID: $ANS-324.08

Frank Bauer, KA3HDO, AMSAT V.P. for Human Spaceflight Programs,
and ARISS International Chairman provided additional information
about SuitSat which is expected to be released from the ISS in
the December 7-8 timeframe.

SuitSat will transmit a direct downlink only signal on 145.99 MHz.
There is a tentative plan to reconfigure the Kenwood D700E radio
aboard ISS from packet mode into cross-band repeater mode to repeat
the Suitsat audio on 437.80 MHz.

All hams are requested to refrain from uplinking packet (or voice) on 145.99 during Suitsat operations. This will allow you and your local neighbors to better hear the SuitSat downlink. SuitSat will only be operational for a few days so we all would like to get the most of its operations. So please do your best to abide by this plan.

We will continue to provide late-breaking information on SuitSat plans on the following web sites. Please check them often. And get your stations ready to copy the audio, voice telemetry, and SSTV picture.
http://www.amsat.org
http://www.rac.ca/ariss

[ANS thanks Frank, KA3HDO for the above information.]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
JoAnne Maenpaa, WB9JEJ
WB9JEJ at amsat dot org

418. APRSPoint thanksgiving special

Newsgroup: rec.radio.amateur.space
Date: 2005-11-25 10:02:31 UTC
From: hxc98@yahoo.com
Message-ID: <1132912951.563235.246700@g14g2000cwa.googlegroups.com>
Source record: 1882

APRSPoint is a complete APRS package with integrated street-level maps.
We are offerring a thanksgiving special. Now you can APRSPoint license
plus MapPoint 2004 for $88.95 instead of $109.95. Please visit
http://www.aprspoint.com/ for details. Thanks.

419. ANS-331 AMSAT News Service Weekly Bulletin

Newsgroup: rec.radio.amateur.space
Date: 2005-11-28 14:17:08 UTC
From: JoAnne Maenpaa <wb9jej_no-spam@earthlink.net>
Message-ID: <EjEif.6329$N45.6021@newsread1.news.atl.earthlink.net>
Source record: 1883

AMSAT NEWS SERVICE
ANS-331

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* PCSat (NO-44) Operational
* PCSat2 Awaiting Improved Sun Angles
* SuitSat Deployment Delay
* SA AMSAT Satellite Conference 2006 - Call For Papers
* POSAT Update
* OSCAR 11 Report - 21 November 2005
* AMSAT Awards
* ARISS Status - 21 November 2005

SB SAT @ AMSAT $ANS-331.01
PCSat (NO-44) Operational

AMSAT News Service Bulletin 331.01
From AMSAT HQ SILVER SPRING, MD.
November 27, 2005
To All RADIO AMATEURS
BID: $ANS-331.01

PCsat (NO-44) Will be OPS NORMAL for 2 weeks starting 25 November 2005. PCsat was last operating OPS-NORMAL back in Jan/Feb 2005 for about a month until it returned to negative-power-budget mode on 16 Feb 2005. PCsat enters full sun every 2 months or so, but the energy budget is only high enough during the winter months for full receovery due to the better sun angles then on its +Z solar panel.

PCsat is using the same path as ARISS for convenience:
UNPROTO APRS VIA ARISS.

APRS mobiles in the USA will also see occasional packets from the Side B downlink on the USA APRS frequency of 144.39.

Please remember the rules for PCsat as published in the User Service Agreement, and that is "no unattended beacons via PCsat" to conserve

power for those people trying live contacts.

[ANS thanks Bob WB4APR for the above information]

/EX

SB SAT @ AMSAT $ANS-331.02
PCSat2 Awaiting Improved Sun Angles

AMSAT News Service Bulletin 331.02
From AMSAT HQ SILVER SPRING, MD.
November 27, 2005
To All RADIO AMATEURS
BID: $ANS-331.02

PCSAT2 shut down due to low voltage sometime after 1855z on 23 Nov due to high beta angle. Nothing was heard on the 2032z pass.

PCSAT2 is attached to the outside of ISS and only gets sun when ISS is maintaining an attitude with good sun angle on our location. The worst angle is on Saturday, 26 November 2005. Recovery is not expected until later next week when sun angles begin to impr ove.Atthattimeitis hoped that joint ops with PCsat (NO-44) will be possible.

Last telemetry was showing the 16 volt Lithimu-Ion Battery down to 11.6 volts. Load current was the usual 313 mA and Solar current was 377 mA near local noon. Even with load sheding, and re-charge, the PCSat2 receivers will be on and the only power savings due to the shut-down will be the 60 mA of the TNC's. This is only 20% of the nominal load current and is insufficient to gain much ground until the entire system returns to better sun angles sometime after 1 Dec.

[ANS thanks Bob, WB4APR, for the above information]

/EX

SB SAT @ AMSAT $ANS-331.03
SuitSat Deployment Delay

AMSAT News Service Bulletin 331.03
From AMSAT HQ SILVER SPRING, MD.
November 27, 2005
To All RADIO AMATEURS
BID: $ANS-331.03

Frank Bauer, KA3HDO, AMSAT V.P. for Human Spaceflight reports that he has received information that the Russian EVA that will deploy SuitSat, which had been planned for December 8, has been delayed to late January/Early
February.

[ANS thanks Frank KA3HDO for the above information]

/EX

SB SAT @ AMSAT $ANS-331.04
SA AMSAT Satellite Conference 2006 - Call For Papers

AMSAT News Service Bulletin 331.04
From AMSAT HQ SILVER SPRING, MD.
November 27, 2005
To All RADIO AMATEURS
BID: $ANS-331.04

CALL FOR PAPERS FOR THE SA AMSAT SATELLITE CONFERENCE 2006
(SA AMSATCON2006)

The Southern Africa Amateur Radio Satellite Association (SA AMSAT) will be holding its annual satellite conference on 25 March 2006 at the University of KwaZulu-Natal. The key note speaker will be Prof Justin Jonas who will deliver a presentation on the SKA (Square kilometre Array) project. Prof Takawira, head of the Department of Electrical and Electronic Engineering will open the conference.

SA AMSAT is calling for proposals for papers on subjects covering the various aspects of satellite and weak signal communication including equipment and antenna design and construction.

Prospective authors should send a brief synopsis of their proposed paper to saamsat@intekom.co.za for consideration by the conference committee. The deadline is 30 January 2006. Proposals and submission may also be mailed to SA AMSAT, PO Box 90438, Garsfontein 0042.

Authors will be advised by 6 February 2006 of acceptance of their papers. Final papers in Microsoft word format are required by 10 March 2006.

The morning sessions will be focussing on technologies while the afternoon sessions will include practical aspects of satellite communication for both experienced satellite enthusiast as well as newcomers.

Attendance to the conference is open to all satellite enthusiasts. Details of registration and fees will be announced during January 2006.

[ANS thanks JoAnne, WB9JEJ, for the above information]

/EX

SB SAT @ AMSAT $ANS-331.05
POSAT Update

AMSAT News Service Bulletin 331.05
From AMSAT HQ SILVER SPRING, MD.
November 27, 2005
To All RADIO AMATEURS
BID: $ANS-331.05

During the AMSAT-UK Colloquium in late July it was announced that it was expected that the POSAT satellite would be reconfigured for amateur radio use.

We are pleased to confirm that this is still the plan but it is taking a little longer than expected to make the necessary non-technical arrangements.

The final operating configurations will take into account the various options discussed on the AMSAT-BB within the constraints imposed by the operating system on board and by the load on the command station.

As soon as we have more detailed information we will make a further announcement

73 Jim Heck, G3WGM
Hon Sec AMSAT-UK

[ANS thanks Jim, G3WGM, for the above information]

/EX

SB SAT @ AMSAT $ANS-331.06
OSCAR 11 Report - 21 November 2005

AMSAT News Service Bulletin 331.06
From AMSAT HQ SILVER SPRING, MD.
November 27, 2005
To All RADIO AMATEURS
BID: $ANS-331.06

During the period 20 October to 21 November 2005 the VHF beacon on 145.826 MHz. resumed transmissions on 21 October, and continued until 30 October. Transmissions then resumed, as expected, on 10 November. However, the beacon stopped transmitting prematurely, some time between 14 and 16 November. If the watchdog resets as expected, then the beacon should restart around 06 December.

Signals have been very variable during this period. Sometimes received at good strength, at other times they were inaudible , even with the BFO switched ON (ie. in CW mode).

The on-board clock continues to show a very large error. Currently it is 19.9 days slow.

All the analogue telemetry channels, 0 to 59 are zero, ie they have failed. The status channels 60 to 67 are still working.

The eclipses have now ended, and the satellite should be in continuous sunlight for the remainder of this year, and next year until early May. This should help the satellite to continue transmitting, although continuous sunlight can cause problems due to excessive temperatures. Power supply problems can be caused by poor earth pointing attitude, ie the sunlight illuminating the ends of the satellite, instead of the solar arrays.

The watchdog timer appears to be operating on the 20 day cycle, ie. approximately ten days ON followed by 10 days OFF. It appears to be unaffected by problems of the on-board clock. However, poor solar attitude, and battery problems, may be combining to produce a low 14 volt line supply. This appears to be causing the beacon to switch OFF prematurely, and resets the watchdog timer cycle. It seems very likely that the battery is now unable to retain its charge, due to having endured around 100,000 partial charge/discharge cycles, always a problem with NiCad cells. When analogue telemetry was transmitted, it showed an unexplained current drain from the 14 volt line. This just adds to the present problems.

The Beacon frequencies are -
VHF 145.826 MHz. AFSK FM ASCII Telemetry
UHF 435.025 MHz. OFF
S-band 2401.5 MHz. OFF

Listeners to OSCAR-11 may be interested in visiting my website which contains an archive of news & telemetry data. It also contains details about using a soundcard or hardware demodulators for data capture. There is software for capturing data, and decoding ASCII telemetry. The URL is www.users.zetnet.co.uk/clivew/

If you place this bulletin on a terrestrial packet network, please use the bulletin identifier $BID:U2RPT115.CWV, to prevent duplication.

[ANS thanks Clive G3CWV for the above information]

/EX

SB SAT @ AMSAT $ANS-331.07
AMSAT Awards

AMSAT News Service Bulletin 331.07
From AMSAT HQ SILVER SPRING, MD.
November 27, 2005
To All RADIO AMATEURS
BID: $ANS-331.07

This week, congratulations go out to all of the following.

Sebastiano Trovato, IW9HBY, Satellite Communications Achievement Award #425
Jonathan Poulton, W0CK, Satellite Communications Achievement Award #426

Keith Austermiller, KB9STR, 51 on 51 Award #42
Brock Thomsen, W6GMT, 51 on 51 Award #43
Mike Herr, WA6ARA, 51 on 51 Award #44

To see all the awards visit http://www.amsat.org or http://www.amsatnet.com

[ANS thanks Bruce KK5DO, for the above information]

/EX

SB SAT @ AMSAT $ANS-331.08
ARISS Status - 21 November 2005

AMSAT News Service Bulletin 331.08
From AMSAT HQ SILVER SPRING, MD.
November 27, 2005
To All RADIO AMATEURS
BID: $ANS-331.08

1. Hermann Middle School Contact Successful

On Wednesday, 16 November 2005, Hermann Middle School, in Hermann, Missouri, contacted the ISS via ham radio. The school library was standing room only, as seven students asked questions of Bill McArthur, KC5ACR. The audio was distributed over the PA system to the rest of the school. MSNBC carried the event live through the school's Hermann Bearcat Amateur Radio Club webcam. Two television stations, channel 5, St. Louis and channel 13, Jefferson City, covered the event and ran video clips in their news casts. The students, volunteers and teachers who participated will receive DVDs as a remembrance of the event. The Hermann Middle School radio contact coordinator reported, "This was a wonderful thing that happened to our rural school district. They are all smiles right now."

2. Takatsuki Education Center Contact Successful

On Thursday, 17 November 2005, Takatsuki Education Center in Takatsuki, Osaka, Japan, experienced a successful contact with the ISS. Ten sixth graders from Hiyoshidai Elementary School posed twenty questions to Bill McArthur, KC5ACR, as an audience of approximately 400 students, parents and others gathered to watch the event. Two television stations, including NHK (Japan Broadcasting Corporation), three newspapers, and other media covered the contact. The contact audio is available at: http://jk1zrw.dyndns.org/takatsuki.html.en

For the video, see:
http://www.city.takatsuki.osaka.jp/multimedia/media/ariss-hiyosidai.asf

3. ARRL Article on Negri and Furtherwick School Contacts

ARRL ran an article covering the Instituto Comprensivo Francesco Negri and Furtherwick Park School contacts. "Students in Italy, England Entertained, Educated via Ham Radio" may be found at:
http://www.arrl.org/news/stories/2005/11/16/1/?nc=1

4.Italian School Contact Video

On Wednesday, November 9, students from Instituto Comprensivo Francesco Negri spoke with astronaut Bill McArthur via amateur radio. Radio operator Claudio Ariotti, IK1SLD, posted a video clip and photos of the event on the following website:
http://scuola.spaceonline.tv/

5. Furtherwick Park School Contact

On Wednesday, November 9, Furtherwick Park School successfully contacted the ISS. The BBC covered the event in an article, "Pupils link up with International Space Station." See: http://www.bbc.co.uk/essex/content/articles/2005/11/11/space_station_feature.shtml

ARISS member, Howard Long has made available a video of the contact. See: http://www.howardlong.com/images/Furtherwick.wmv

6. Russian EVA to Deploy SuitSat Postponed

SuitSat, a Russian spacesuit containing ham radio equipment and a CD of student artwork, was scheduled to be deployed during a Russian EVA on December 8. This EVA has been postponed and is not expected to take place until late January/early February 2006.

This unique satellite continues to receive news coverage, as Frank Bauer's SuitSat paper has been translated into French and posted on the AMSAT-France website. See: http://www.amsat-france.org/ariss

[ANS thanks Carol, KB3LKI for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS
ku4os at amsat dot org

420. WSR-331 AMSAT Weekly Satellite Report

Newsgroup: rec.radio.amateur.space
Date: 2005-11-28 14:17:12 UTC
From: JoAnne Maenpaa <wb9jej_no-spam@earthlink.net>
Message-ID: <IjEif.6330$N45.5620@newsread1.news.atl.earthlink.net>
Source record: 1884

This report is organized into 4 parts.
Part 1 - operational analog amateur satellites.
Part 2 - operational digital amateur satellites.
Part 3 - non - operational satellites
Part 4 - proposed satellites

SB SAT @ AMSAT <W8ISS $ANS-331.S1
WSR 331 Part 1 11/27/2005

AMSAT NEWS SERVICE BULLETIN 331.S1 FROM AMSAT HQ
SILVER SPRING, MD, November 27, 2005
TO ALL RADIO AMATEURS
BID: $ANS-331.S1

VO-52 HAMSAT
Catalog Number: 28650
Launch Date: May 05,2005

Status: Testing
Current Mode: U/V - Dutch Transponder

Proposed frequencies:

Indian Transponder:
Uplink : 435.220 MHz to 435.280 MHz LSB/CW
Downlink: 145.870 MHz to 145.930 MHz USB/CW
Beacom : 145.859330 MHZ CW

Dutch Transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacon : 145.860MHz 12WPM with CW message

This from William Leijenaar, PE1RAH:
Dear AMSATs,

I wish I had the same free time now as when I designed the HAMSAT and P3e transponder. Unfortunatly these times have been changed (for the moment) due to QRL things.

However, I often try to be QRV on the HAMSAT and check the signals from my transponder and read the messages on amsat-bb. I just read about the beacon "problem". The "problem" with the beacon is actually not a problem but it is known. The beacon signal is injected at the IF, and runs throught the transponder from the IF section, up converter, via the final PA to the antenna.

The changes you hear on the beacon frequency is caused by the amplitude limit-
ers in the IF that are activated by a too strong uplink signal. These limiters
are only for protection, to avoid that the IF and VHF amplifiers get overload-
ed and generate all kinds of unwanted signals at the output.

My transponder is straight forward to keep it physical small and cheap in cost
(as I had no sponsors). Unlike most other transponders my transponder on HAM-
SAT has no AGC system. It gives always maximum gain with maximum sensitivity.
The main reason is that the AGC systems I had didn't fit in the small sized
box. As an option I choose for limiters, and it worked great in tests.

Secondly, I tought limiters might be helpfull against aligators. To deal with
too strong signals most transponder have an AGC to lower the RX gain, and act-
ually be helpfull to the alligators. With the limiters their SSB signal will
get distorted and they might lower their powers to have better audio quality.

The change in beacon sound is an indication for too much uplink powers and
will be heared mainly in areas where higher powers are available on the up-
link, like US, Europe, Japan...

Its funny to know that nobody here has discovered that the bandpass is shifted
some down in frequency... There is no technical failure, the reason is known
here... No panic please :o)

Please keep in mind that this transponder is my privat work and privat money.
Frankly speaking this is my privat transponder I "give" to the amateur world.
I was one of those many poor students, and this was the best I could do with
my resources I had available at that time... The whole thing is just 16cm x
10cm x 3cm !! even smaller than the professional Indian transponder :o)

I hope you all enjoy my transponder even when it is not perfect.
[11272005]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - V/U 9k6
VOICE REPEATER - V/U FM

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
Analog voice uplink: 145.880 MHZ FM
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

This from the AO-51 Command team:
21 Nov
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital

5 Dec
FM Repeater, L/U
Uplink: 1268.700 mhz FM
Downlink 435.300 mhz FM

8 Dec (Wed Night)
9k6 Digital, V/U, High Power, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital

12 Dec
FM Repeater, V/S
Uplink: 145.920 mhz FM, No PL Tone
Downlink 2401.200 mhz FM

19 Dec
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital

[ANS-WSR thanks Mike Kingery, KE4AZN for the above information]
[11202005]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz (67.0 Hz PL tone) (See below for operating
procedures)
Downlink: 436.795 MHz

There have been unconfirmed reports on the amsat-bb remailer that SO-50 has
shifted downlink frequency as much as 5khz up. This both from Europe.

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The
order of operation is thus: (allow for Doppler as necessary)

1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer
on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater
on
and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10
minute timer.
[09122004]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplink: 145.850 145.870 145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

John, N4QWL reports on July 16th, 2005:
Last evening I had a AOS to LOS qso with WI2W. FO-29 came up at 01:17z here
in
FM07 and I found WI2W and we chatted until 01:33z. The satellite was at 2
degrees elevation when I finally heard him start to crackle a bit. What a
great QSO! To think that I watched this bird launch back in 1996 and it is
still working so well is a real thrill. I believe I still have the video. I
might just look for it and watch it again. Boy do I love this satellite
stuff!
Look for you all up there.

Please send the reception reports to lab2 'at' jarl.or.jp.
Please use the subject line: 'FO-29 reception report'.

Mineo, JE9PEL, has an FO-29 satellite telemetry analysis program that will
automatically analyze all digital telemetry from the satellite (such as
current, voltage and temperature). FO29CWTE is available at:
http://www.ne.jp/asahi/hamradio/je9pel/

[ANS-WSR wishes to thanks John, N4QWL for this week's report]
[11132005]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

The latest information on AO-27 from control operator Michael Wyrick, N3UC
(former N4USI), can be found at:
http://www.ao27.org

An AO-27 question-and-answer page is available on the AMSAT-NA web site,
with
updates by Ray, W2RS. The URL is:
http://www.amsat.org/amsat/intro/ao27faq.html

[ANS-WSR thanks John, K6YK, for this week's AO-27 report]
[11132005]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Semi-operational in sunlight.
Return to active status: June 21,2002

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A
145.975 to 145.925 MHz CW/USB Mode B
Beacon: 29.502 MHz, 145.972 MHz, 435.1 MHz, 2304.1 MHz

Emily, W0EEC has created a website to allow the users of AO-7 to record
contacts, observations and use of the satellite more effectively at:
http://www.emilyshouse.com/experthams/ao7/main.php
This includes the ability to log contacts.

Tim, K3TZ has written a program to decode AO-07 telemetry. The program can
be
downloaded at:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

For more AO-7 info:
http://www.amsat.org/amsat/sats/n7hpr/ao7.html
[11132005]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544

Launch date: November 20, 1998

Status: Operational
Current Mode: DIGIPEATER
Digipeater: ACTIVE

The current Expedition 12 crew is:
Commander: William McArthur - KC5ACR
Flight Engineer: Valery Tokarev - (no call)

Worldwide packet uplink: 145.990 MHz FM
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM
Doppler Shift is 10 KHz

Russian callsigns: RS0ISS, RZ3DZR
USA callsign: NA1SS
Packet station mailbox callsign: RS0ISS-11
Packet station keyboard callsign: RS0ISS-3
Digipeater callsign: ARISS

The ISS Fan Club Webpage < http://www.issfanclub.com > reports that the
Digi-
peater is active as of Nov 14th, 2005 at 0207UTC.

The ISS daily crew schedule can be found at:
http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is
NOT
translated from Russian and posted.

More information is available at:
http://www.rac.ca/ariss
http://spaceflight.nasa.gov/station/reference/radio/
http://www.marexmg.org/fileshtml/unprotopage.html
http://www.issfanclub.com
http://oscar.dcarr.org/
[11132005]
NNNN
/EX

SB SAT @ AMSAT <W8ISS $ANS-331.S2
WSR 331 Part 2 11/27/2005

AMSAT NEWS SERVICE BULLETIN 331.S2 FROM AMSAT HQ
SILVER SPRING, MD, November 27, 2005
TO ALL RADIO AMATEURS
BID: $ANS-331.S2

PCSAT2 ?0-??
Catalog Number: 25544
Launch Date: August 1, 2005

Status: Battery-saving mode
Current Mode: None

Digital Downlink: 435.275 Mhz
Digital Uplink: 145.825 Mhz
PSK-31 Downlink: 435.275 Mhz
PSK-31 Uplink: 29.400 - 29.403 Mhz

Broadcast:
BBS:

PCSAT2 was installed on the exterior of the International Space Station and
was activated on August 3, 2005.

Packets seen from PCSAT2 can be reviewed at:
http://www.findu.com/cgi-bin/pcsat2.cgi

A screen shot of both the 9600 bps and 1200 bps decoded data as seen by
Simon,
9W2QC, can be seen at:
http://www.9w2qc.net/pcsat2/

More information on PCSAT2 can be found at:
http://web.usna.navy.mil/~bruninga/pcsat2.html
[11272005}
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - V/U 9k6
VOICE REPEATER - V/U FM

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
Analog voice uplink: 145.880 MHZ FM
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

This from the AO-51 Command team:

21 Nov
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital

5 Dec
FM Repeater, L/U
Uplink: 1268.700 mhz FM
Downlink 435.300 mhz FM

8 Dec (Wed Night)
9k6 Digital, V/U, High Power, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital

12 Dec
FM Repeater, V/S
Uplink: 145.920 mhz FM, No PL Tone
Downlink 2401.200 mhz FM

19 Dec
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital
[ANS-WSR thanks Mike Kingery, KE4AZN for the above information]
[11202005]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Operational

General Usage Uplink/Downlink:145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSat is a 1200-baud APRS digipeater designed for use by stations using
hand-held or mobile transceivers. Downlinks feed a central web site at:
http://pcsat.aprs.org

The APRS-equipped PCSat was built by midshipmen from the U.S. Naval Academy
under the guidance of Bob Bruninga, WB4APR.
[11272005]
=====
CUTE-1
Catalog number: 27844
Launched: June 30,2003

Status: Operational

Uplink: ?
Downlink: 436.8375 CW
437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)
Cliff, K7RR reports:
In the latest Weekly Satellite Report, CUTE 1, #27844 is listed as
OPERATIONAL?
Indeed it is very operational as a CUBESAT sending CW telemetry on
436.8345 MHz. At the July 7 2005, 23:45:20 pass over the Western USA:
CUTE 1 6B A4 xx 7F D7 66A8 4702 FF FF7C 65
CUTE 1 6C A6 59 80 D9 66A8 4702 FF FE7C B6

The June 30th KEPS were within ten seconds of AOS and LOS. It is an very
good object to practice tracking as the orbit and transmitter power are
similar to proposed CUBESATS awaiting launch this December. As a check
for Doppler correction, the lack of change in tone is an excellent
indicator.

CUTE 1 is a Japanese (Tokyo Institute of Technology) one kilogram
nanosatellite that was launched by a Rokot rocket from Plesetsk at
14:15 UT on 30 June 2003. It carries a 100 mW beacon at 436.8375 MHz.
Initial orbital parameters were period 101.4 min, apogee 831 km, perigee
819 km, and inclination 98.7?.

For further info about CUTE-1 goto:
http://lss.mes.titech.ac.jp/ssp/cubesat/operation/Schedule_e.html

[ANS WSR wishes to thank Cliff, K7RR, for this week's information]
[07242005]
=====
GO-32 TECHSAT-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
(435.325 n/a - temperature problems)
Uplinks: 145.850, 145.890, 145.930 FM
1269.700, 1269.800, 1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

Jeff, KB2M, reports November 15th, 2005:
I might be wrong about this, but as I am the only one I see working GO-32
here goes. If you do a DIR request up on the 145.890 uplink the bird turns
on. Give it a try....

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[ANS-WSR wishes to thank Jeff, KB2M for this weeks report.]
[11202005]
=====

AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for
APRS users.

Uplink: 145.90 145.92 145.94 145.96 MHz FM
(using 1200-baud Manchester FSK)
Downlink: 437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon: 2401.1428 MHz
Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

A WOD collection of current graphics along with general information
and telemetry samples can be found at:
http://www.telecable.es/personales/ea1bcu
[05092004]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational?

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK).
approx. 10 days ON, 10 days OFF
Mode-S Beacon: 2401.500 MHz. ... OFF
UHFBeacon: 435.025 MHz. ... OFF

During the period 24 September to 25 October 2005 the VHF beacon on
145.826MHz resumed transmissions, as expected, on 30 September, sometime
between 06:05 and 06:42 UTC passes. Reasonable signals were also
captured on the 17:44 pass, later that day. However by the 16:49 UTC
pass on 02 October, the beacon had switched OFF. Transmissions resumed
on 21 October, and should continue until around 31 October.

The on-board clock continues to show a very large error. Currently it is
19.2394 days slow, having lost six hours while the beacon was last OFF,
ie. between 02 October and 21 October. When the beacon is ON, the clock
is stable to within a few seconds.

All the analogue telemetry channels, 0 to 59 are zero, ie they have
failed. The status channels 60 to 67 are still working.

The eclipses have now ended, and the satellite should be in continuous
sunlight for the remainder of this year, and well into next year. This
should help the satellite to continue transmitting, although continuous
sunlight can cause problems due to excessive temperatures.

The watchdog timer appears to be operating on the 20 day cycle, ie.
approximately ten days ON followed by 10 days OFF. It appears to be
uneffected by problems of the on-board clock. However, poor solar

attitude, and battery problems, may be combining to produce a low line voltage. This causes the beacon to switch OFF premeaturely, and resets the watchdog timer cycle.

The Beacon frequencies are -
VHF 145.826 MHz. AFSK FM ASCII Telemetry
UHF 435.025 MHz. OFF
S-band 2401.5 MHz. OFF

Listeners to OSCAR-11 may be interested in visiting my website which contains
an archive of news & telemetry data. It also contains details about using a soundcard or hardware demodulators for data capture. There is software for capturing data, and decoding ASCII telemetry. The URL is:

www.users.zetnet.co.uk/clivew/

If you place this bulletin on a terrestrial packet network, please use the bulletin identifier $BID:U2RPT114.CWV, to prevent duplication.

More information on UO-11 OSCAR-11 can be found at:
http://www.users.zetnet.co.uk/clivew/

MPEG3 files can be found here at Mineo, JE9PEL website:
http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[ANS-WSR thanks Clive G3CWV for the above information]
[10302005]
NNNN
/EX

SB SAT @ AMSAT <W8ISS $ANS-331.S3
WSR 331 Part 3 11/27/2005

AMSAT NEWS SERVICE BULLETIN 331.S3 FROM AMSAT HQ
SILVER SPRING, MD, NOVENBER 27, 2005
TO ALL RADIO AMATEURS
BID: $ANS-331.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

SSETI ?O-??
Catalog Number: 28894
Launch Date: October 27, 2005

Status: In orbit - being commissioned

A daily report of the launch campaign is being maintained at
http://sseti.gte.tuwien.ac.at/express/mop/index.php?uri=news.html
This mission operations site is completely up-to-date regarding Kepler TLEs and other LEOP "Launch and Early Operations Phase" details.

The SERACC software, needed to decode and submit the received data to the SSETI database, together with some audio files containing recorded 9k6 signal

to experiment with is also now available

The ESA website about SSETI Express is at:
http://www.esa.int/SPECIALS/sseti_express/SEMARJ7X9DE_0.html

The latest version of the SSETI Express handbook can be downloaded free
of charge from the AMSAT-UK website at:
http://www.uk.amsat.org/

More SSETI Links at:

SpaceDaily has a report about SSETI at:
http://www.spacedaily.com/news/internet-04zzzu.html

You can find more info about SSETI at:
http://sseti.gte.tuwien.ac.at/WSW4/

Latest news about SSETI can be found at:
http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php

Look at the website for the SSETI Express webcam
http://sseti.gte.tuwien.ac.at/WSW4/webcam.htm
[ANS-WSR thanks Graham, UA/G3VZV and Trevor, M5AKA for the above]
[11202005]
======
POSAT-1 PO-28
Catalog Number: 22829
Launched : September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 435.250 MHz
435.275 MHz

Uplink: 145.925 MHz
145.975 MHz

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

PO-28 (POSAT-1), Portugal's first satellite, launched 12 years ago,will
be
turned over to Amateur Radio use in the very near future. That was the
word
July 30 from AMSAT-UK Secretary Jim Heck, G3WGM, during the AMSAT-UK
Internat-
ional Space Colloquium in Guildford, England.

Launched September 25, 1993, the satellite operated as a packet
store-and-for-
ward BBS (9600 baud FM FSK) on Amateur Radio frequencies for several
weeks in
early 1994. Over the years, PO-28's primary usage has been commercial,
although plans have called for eventually shifting its operation to ham

radio
use. G3WGM reports that following lengthy negotiations it has been
agreed that
the satellite can be switched permanently to amateur frequencies. The
change-
over is expected to take a couple of weeks.

The Portuguese satellite was built at the University of Surrey as part
of a
collaborative satellite technology program that involved industry and
academe.
Uplink frequencies will be 145.925 and 145.975 MHz. Downlink frequencies
will
be 435.250 and 435.275 MHz. More information on PO-28 is on the AMSAT
Web site

http://www.amsat.org/amsat/sats/n7hpr/po28.html.

Uplink Frequencies: 145.925 and 145.975 MHz
Downlink Frequencies: 435.250 and 435.275 MHz

Orbit: 822 x 800 km, 98.6 deg inclined, sun-synchronous.

Transponder capabilities include FM repeater and 38k4 data. If you want
to hear how loud this satellite is, listen on 429.950 until the change
back to amateur radio service.

Keplerian elements for PO-28 are currently contained in the AMSAT keps
bull-
etins and at Celestrak in amateur.txt using the name "POSAT". Users of
Space
Track should query the NORAD Satellite ID number 22829. The name listed
by
Space Track is "EYESAT A".

More information of POSAT-1 can be found at:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
http://www.amsat.org/amsat/sats/n7hpr/po28.html
[ANS-WSR wishes to thank Duane Naugle, KO6BT, for this week's update.]
[11062005]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon: 145.810 MHz (unmodulated carrier)

AO-10 has been locked into a Mode-B, 70-cm uplink and
2-meter downlink for several years.

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Non-operational

Uplink: 145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink: 435.812 MHz SSB
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Alberto E. Zagni - I2KBD reports on 02/13/05
The spacecraft is in MBL (safe mode) and is trasmitting just 6 channels
of telemetry. Temperatures and voltage are nominal, but there seems to
be a problem with the onboard receiver, refusing to accept commands.
The spacecraft was launched in 1993, thus nearing 12 years in orbit...

Best regards
Alberto E. Zagni - I2KBD
ITAMSAT Mission Director

More information of IO-26 can be found at:

http://joshua.micronet.it/english/itamsat/itamsathome.html
http://www.amsat.org/amsat/sats/n7hpr/io26.html
www.itamsat.org

[02132005]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon: 29.408 MHz
Robot: 29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB
Beacon: 145.860 MHz
Robot: 145.908 MHz

[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB
Beacon: 29.352 MHz (intermittent)
SSB meeting frequency: 29.380 MHz (unofficial)

John, KD6PAG reports on June 16, 2004 to WSR:
RS-15 beacon seemed to be back in the mode where it's a tone about 5
seconds off and then 5 seconds on this morning.

WSR is looking for more confirmations of RS-15 coming back.

[ANS-WSR thanks John, KD6PAG for RS-15 information]
[06202004]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplink: 145.84 145.86 145.88 145.90 MHz FM
(using 1200-baud Manchester FSK)
CW downlink: 437.125 MHz
Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM
Broadcast Callsign: HLO1-11
BBS: HLO1-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a
non-operational status.
[05092004]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM (9600-baud FSK)
Downlink: 436.500 MHz FM
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink frequency (listed on the PanSat web site) 436.500 MHz

The satellite is not available for general uplink transmissions.

The Naval Postgraduate School developed PanSat. At the time of
launch, PanSat spread-spectrum digital transponders were to
be available to Amateur Radio operators along with software to utilize
this technology.

The satellite is still operating, however, the spread spectrum packet
radio portion never took place. The spacecraft is now beyond it's
initial 2-year mission life, but telemetry records are still being
downloaded.

For more information, visit the official PanSat web site at:
http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS-WSR has no further information]
[05232004]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlink: 437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA
web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplink V-band 145.840 - 145.990 MHz CW/LSB
U-band 435.550 - 435.800 MHz CW/LSB
L1-band 1269.250 - 1269.500 MHz CW/LSB
L2-band 1268.325 - 1268.575 MHz CW/LSB
S1-band 2400.350 - 2400.600 MHz CW/LSB
Downlink: S2-band 2401.225 - 2401.475 MHz CW/USB
K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon: 2401.323, 24,048.035
[05232004]

SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational
Downlink: 437.075 MHz
Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz
Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]
=====

NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
callsign KE6QMD, as per the user service agreement located at the
following
URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink: 145.850 or 145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz
Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[11202005]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Semi-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

AO-49 (SAFIR-M) is a German amateur radio payload onboard the small German
scientific satellite "RUBIN-2".

AO-49 was built by the German amateur radio association "AATiS e.V." (German
acronym for "Arbeitskreis Amateurfunk und Telekommunikation in der Schule",
which means: 'working group for amateur radio and telecommunications in

schools'). AO-49 is designed as a "store and broadcast" system for APRS
based
messages, dedicated for the use of schools in combination with the existing
WX-Net and planned buoy experiments in Germany.

No transmissions detected since the 1st of February 2003! It appears AO-49
is
not properly aligned to illuminate the solar panels. This should end soon.
Due
to its orbit, AO-49 will be in a phase without eclipses until 13Feb03.

Martin DG8UAU has written a small software program "SAFIR-M Decoder" to
allow
decoding of the received DATA0 frames. It is available at:
http://amend.gmxhome.de in the section Aktuelles.

Details on AO-49 (SAFIR-M) can be found at:
http://amend.gmxhome.de

Information about AATiS e.V. is available at:
http://www.aatis.de
[11132005]
NNNN
/EX

SB SAT @ AMSAT <W8ISS $ANS-331.S4
WSR 331 Part 4 11/27/2005

AMSAT NEWS SERVICE BULLETIN 331.S4 FROM AMSAT HQ
SILVER SPRING, MD, NOVEMBER 27,2005
TO ALL RADIO AMATEURS
BID: $ANS-331.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE
PROPOSED FOR LAUNCH AT THIS TIME:

UCISAT ?O-??
Catalog number:
Proposed Launch Date: October 31, 2005

Status: Under Construction

Downlink: Submission in Progress
Uplink: Submission in Progress
Callsign: Submission in Progress
[11272005]
=====
PHASE 3E ?O-??
Catalog Number:
Proposed Launch Date: Early 2006

Status: Under Construction

For the latest project status update please visit the AMSAT-DL
P3-E web page:
http://www.amsat-dl.org/p3e/

[ANS-WSR wishes to thank William Leijenaar, PE1RAH for this week's report]
[10022005]
=====
CP1 ?o-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N6CP
Proposed Transmit Frequency: 436.845
[03272005]
=====
CP2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.325
[03272005]
=====
HAUSAT1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: D90HP
Proposed Transmit Frequency: 437.465
[03272005]
=====
ICE Cube 1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: W2CXM
Proposed Transmit Frequency: 437.305
[03272005]
=====
ICE Cube 2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N2VR
Proposed Transmit Frequency: 437.425
[03272005]
=====
ION ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.505

[03272005]
=====
KUTEsat ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: KC0RMW
Proposed Transmit Frequency: 437.385
[03272005]
=====
MEROPE ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: K7MSU-1
Proposed Transmit Frequency: 145.980
[03272005]
=====
nCUBE1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
2407.25
[03272005]
=====
RINCON ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
437.345
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====

SEEDS ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: JQ1YGU
Proposed Transmit Frequency: 437.485
[03272005]
=====
Mea Huaka ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.405
[03272005]
=====
SUITSAT ?O-??
Catalog Number:
Proposed Release Date: December 8th, 2005

Proposed Callsign: RS0RS ?
Proposed Transmit Frequency: 145.990

This from Frank, KA3HDO:
I have recieved information that the Russian EVA that will deply SuitSat, planned for December 8th, has been delayed to late January/Early February 2006. As we get more information, we will post it.

[ANS-WSR wishes to thank Frank Bauer, KA3HDO for this weeks report]
[11272005]
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/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)

* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

421. ANS-338 AMSAT News Service Weekly Bulletin

Newsgroup: rec.radio.amateur.space
Date: 2005-12-04 23:25:04 UTC
From: JoAnne Maenpaa <wb9jej_no-spam@earthlink.net>
Message-ID: <kVKkf.9856$wf.8653@newsread3.news.atl.earthlink.net>
Source record: 1885

AMSAT NEWS SERVICE
ANS-338

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* PCSAT1 and PCSAT2 Two-Hop Operations
* ISS Active on Casual Contacts
* Straight Key Night on OSCAR 2006
* AMSAT Awards This Week
* ARISS Status for the week of November 28, 2005
* Russian Space Agency Explains December Spacewalk Delay
* St. Pierre and Miquelon Satellite DXpedition Report
* Eagle Hardware Elements

SB SAT @ AMSAT $ANS-338.01
PCSAT1 and PCSAT2 Two-Hop Operations

AMSAT News Service Bulletin 338.01
From AMSAT HQ SILVER SPRING, MD.
December 4, 2005
To All RADIO AMATEURS
BID: $ANS-338.01

Bob Bruninga, WB4APR, writing on behalf of the US Naval Academy Satellite Laboratory, reported this week that the original PCSat (PCSAT1), which is operational only when its solar cells are in sunlight, has had as many as 45 users in a single day and 72 dif-ferent callsigns over a period of two days. This is because PCSAT1's orbit has taken the satellite into a 12 day full-sun period.

Additionally, PCSAT2, mounted aboard an external strut on the International Space Station will be activated as its solar cells will be once again facing the sun as the ISS makes orbital attitude adjustments. The PCSAT2 user digipeater with its 145.825 uplink and 435.275 downlink will be back on-the-air.

With PCSAT1 and PCSAT2 both active, the control team at the
US Naval Academy will make a few changes to improve the chances
of mulitple satellite hops of digipeated signals:

1) We will add SGATE as an alias to PCSAT2 so that ANY over
the horizon PCSAT1 originated packets that are heard by PCSAT2
will be relayed since these packets already contain the SGATE
digipeating path.

2) Stations sending up through PCSAT1 as a first hop may get a
second hop through PCSAT2 if they use any dual hop path (ARISS,
ARISS; or WIDE2-2; or PCSAT2,PCSAT1; etc) The second hop will
only be heard on the PCSAT2 435.275 downlink.

3) As of December 3, the PCSAT2 435.275 downlink was switched
down to 145.825 so that PCSAT2 and PCSAT1 are identical systems
both with uplinks and downlinks on 145.825 acting as a 2-hop
constellation both on 145.825. Both will be supporting the normal
APRS aliases of WIDE, or ARISS, or APRSAT or WIDE2-2 so that you
can digipeat through either one or both.

4) The PCSAT2 dowlink will shift back to 435.275 on 7 Dec to avoid
any possible interference with the next school contact with Sanderson,
TX, on 8 Dec at 1730z.

Bob reminds PCSat users, "Of course, the MORE that try the FEWER
will be the success rate. So if you really don't know what you are
doing, PLEASE do not transmit and just watch. YOUR station may be
the one that SEES the dual hop, so that should be a good reward too.
Make your packet as SHORT as possible and use the shortest TXD for
your TNC. The PCSATs should respond with TXD's as low as 10 which
is 100 milliseconds in real-time. Also, transmit occassionally,
NOT repeatedly, maybe once a minute or so.

Bob summarized, "When PCSAT1 returns to eclipses, we are usually
lucky enough to keep her from resetting for a few more weeks and
at least daylight operations can continue normally. But once it
resets, either due to peak user load or a Single Event Upset from
radiation, then we lose her again until the next full sun period
in the first week of March 2006."

For additional details please see the PCSAT2 web page at:
http://www.ew.usna.edu/~bruninga/pcsat2.html

[ANS thanks Bob, WB4APR, and the US Naval Academy Satellite Lab
for the above information]

/EX

SB SAT @ AMSAT $ANS-338.02
ISS Active on Casual Contacts

AMSAT News Service Bulletin 338.02
From AMSAT HQ SILVER SPRING, MD.
December 4, 2005

To All RADIO AMATEURS
BID: $ANS-338.02

International Space Station Commander, Astronaut Bill McArthur, KC5ACR, has been very active on the NA1SS amateur radio station aboard the ISS over the past several days. Since November 23, NA1SS has made over 50 contacts during brief operating opportunities. This past week, reports from Turkey, South Africa, South America and North America indicated NA1SS was calling CQ and making contacts.

For those who are still trying for a contact with the ISS, keep it up! For those of you lucky enough to work him, congratulations, but please give the others a little more time before making another contact since you have your QSO for Expedition 12. Lets see how many different stations he can work.

In addition, Bill has been doing 2 school contacts a week when his schedule allows. Not since Expedition 3 has a crew member done this on a regular basis. Please consider telling Bill, "Thank you" for all of us if you are fortunate enough to speak with NA1SS.

Worldwide packet uplink: 145.990 MHz FM
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM
Doppler Shift is 10 KHz

Russian callsigns: RS0ISS, RZ3DZR
USA callsign: NA1SS
Packet station mailbox callsign: RS0ISS-11
Packet station keyboard callsign: RS0ISS-3
Digipeater callsign: ARISS

[ANS thanks Kenneth, N5VHO for the above information]

/EX

SB SAT @ AMSAT $ANS-338.03
Straight Key Night on OSCAR 2006

AMSAT News Service Bulletin 338.03
From AMSAT HQ SILVER SPRING, MD.
December 4, 2005
To All RADIO AMATEURS
BID: $ANS-338.03

Once again AMSAT-NA is pleased to sponsor Straight Key Night on OSCAR for enjoyment by all radio amateurs.

OSCAR SKN 2006 will run for 24 hours, 0000-2400 UTC, on 1 January 2006. It's very simple: no rules, no scoring, and no need to send in a log. Just operate CW through any OSCAR satellite using a straight hand key, working as many other SKN participants as you can. Contacts via the moon (OSCAR Zero) count too.

As in past years, all participants are requested to nominate one of the operators they worked for "Best Fist" recognition. Your nominee need not have the best fist of those you heard, just of those you worked.

Please send all nominations to Ray Soifer via w2rs@arrl.net.

A list of those nominated will be published via the AMSAT News Service in early February, and in The AMSAT Journal.

[ANS thanks Ray, W2RS for the above information]

/EX

SB SAT @ AMSAT $ANS-338.04
AMSAT Awards This Week

AMSAT News Service Bulletin 338.04
From AMSAT HQ SILVER SPRING, MD.
December 4, 2005
To All RADIO AMATEURS
BID: $ANS-338.04

Bruce Paige, KK5DO, AMSAT Director Contests and Awards, says this week congratulations go out to all of the following.

Whitton Amateur Radio Group, G0MIN, 51 on 51 Award #45
Tokuhisa Saito, JA2NLT, 51 on 51 Award #46

To see all the awards visit http://www.amsat.org.

[ANS thanks Bruce, KK5DO, for the above information]

/EX

SB SAT @ AMSAT $ANS-338.05
ARISS Status for the week of November 28, 2005

AMSAT News Service Bulletin 338.05
From AMSAT HQ SILVER SPRING, MD.
December 4, 2005
To All RADIO AMATEURS
BID: $ANS-338.05

1. ESA CERN Contact Successful
On Tuesday, November 22, eighteen students attending the ESA CERN Geneva Science Festival each asked a question of Bill McArthur, KC5ACR, via the telebridge station, NN1SS, in Greenbelt, Maryland. The event was attended by approximately 300 students and teachers, and at least one television station and a professional photographer. ESA will edit and post a video

of the contact on its website in the near future.

The audio was fed to the Echolink AMSAT and EDU_NET conference room servers. Twenty-three connections were made, including three repeater nodes, from the following countries: Belgium, France, Germany, Israel, Morocco, Slovenia,
Switzerland, Thailand, the U.K. and the U.S.A.

A write up on the contact, "Students at 'Science on Stage' Festival Talk with ISS" is available on the ARISS Europe website. A link to the audio is included. See: http://www.ariss-eu.org/2005_11_24.htm

2. Central Park Middle School (NES) Contact Successful
On Wednesday, November 23, students from Central Park Middle School, (a NASA Explorer School), in Schenectady, New York, experienced a successful ARISS contact via the telebridge station, W6SRJ, in Santa Rosa, California. Astronaut Bill McArthur, KC5ACR, answered eighteen questions posed to him by thirteen Central Park students. Four television stations (6, 9, 13 and Fox 23) covered the event.

Echolink was used for this contact, where thirty-one connections were made from these countries: Bangladesh, Canada, France, Germany, Israel, Italy, Morocco, Oman, Romania, Russia, Sri Lanka, Taiwan, Thailand, the U.K., and the U.S.A.

Central Park posted a short story covering the contact on its website: "Central Park NASA Explorer School Call International Space Station, Again" may be found at:
http://www.schenectady.k12.ny.us/NASAExplorerSchool/spacestation112305.htm>

3. School Contacts This Week
Hawthorne Brook Middle School in Townsend, Massachusetts completed an ARISS contact on Tuesday, November 29. Ralph McCall School in Airdrie, Alberta, Canada completed an ARISS contact on Friday, December 2.

4. ARRL's New Book Mentions ISS Ham Contacts
ARRL has released, for sale, the first edition of a brand new book, "Basic Radio, Understanding the Key Building Blocks." The first page of one chapter features a large NASA photograph of astronaut Leroy Chiao, who earned ham radio call sign KE5BRW. The descriptor explains that Leroy set a record in space. His record was making 23 educational radio contacts with school students while leading Expedition 10 aboard the International Space Station.

[ANS thanks Carol, KB3LKI for the above information]

/EX

SB SAT @ AMSAT $ANS-338.06
Russian Space Agency Explains December Spacewalk Delay

AMSAT News Service Bulletin 338.06
From AMSAT HQ SILVER SPRING, MD.
December 4, 2005

To All RADIO AMATEURS
BID: $ANS-338.06

Russian space agency officials on Thursday, December 1, officially postponed the scheduled December 8 spacewalk by the Russian-American crew of the International Space Station. The December 8 spacewalk was originally scheduled to release SuitSat.

"The extravehicular activity of Valery Tokarev and William McArthur is not planned in December," Russia's Mission Control Center spokesman Valery Lyndin told the Itar-Tass news agency.

Mission Control Center Flight Director Vladimir Solovyov said the postponement was made possible since the spacemen would not have to prepare to receive a U.S. shuttle in March, as had been planned.

"It was initially planned that the American shuttle will come to the ISS in March, but now it is apparent that the 12th crew will not work with the shuttle," Solovyov told Itar-Tass.

NASA officials say the shuttle will not be launched earlier than May or July and set February 2, 2006 as the date for the postponed space-walk. SuitSat is planned for deployment during this ISS spacewalk.

[ANS thanks SpaceDaily.com for the above information]

/EX

SB SAT @ AMSAT $ANS-338.07
St. Pierre and Miquelon Satellite DXpedition Report

AMSAT News Service Bulletin 338.07
From AMSAT HQ SILVER SPRING, MD.
December 4, 2005
To All RADIO AMATEURS
BID: $ANS-338.07

Ian, K8MM, reported DXpedition success from St. Pierre and Miquelon. "I had a great time, satellite operation was a blast, and I'm really glad that I took satellite gear with me. I was using my IC-910 with a pair of homebrew K5OE TPMII antennas along with Icom preamps.

Sunday night, the first night of the expedition, was spent at the Hotel Robert on St. Pierre. The local terrain was not favorable for satellites as I could only hear the overhead passes. The first bird I managed to get into was VO-52 and I called CQ for close to 10 minutes without making any contact as nobody was listening to the bird at that time. After a couple more fruitless tries on FO-29 and AO-51 I took the gear down and repacked it for the ferry trip to Miquelon in the morning.

Wednesday morning we awoke to gale force winds and rain. Having had my fill of HF pile-ups, I dug out the satellite antennas, put on my rain gear and braved the elements. You have not lived until you're tried put-ting up antennas in 70 mph winds! I had to wait until AO-51 was about 20

degrees in elevation before it wasn't blocked by the hotel or the mountain so I could hear it clearly. There weren't any qso's in progress so I gave a short CQ with my call and the bird quickly sprang to life with KB2YCC calling me. We exchanged info and he was the first satellite qso in the log for the dxpedition. More guys that were quickly worked on that pass were VO1ONE, W8EH, AJ9K and N8BBQ in that order.

A look at the computer showed that FO-29 would be giving me an EU pass. I put my rain gear on and went back outside to point the antennas toward the East. It was directly over the sea for the portion of time EU and FP were in it's footprint. I worked F6BBJ, ON5NY on CW. On phone the satellite sounded pile-up on 20M! I managed work PH7PCF, 2E1EUB, and PH7AT. There are many more stations in the log than I can mention here.

Operating on the FM birds, KO4MA, K1PL, WI2W, KC8ZFN, W0SAT, and many other stations made it into the log.

If anyone is thinking of going to Miquelon there isn't a place that I can't recommend more highly than the Maxhotel and I left my TPMII satellite antennas there for anyone that wants to use them. The hotel is ham friendly and Christina, the manager at the hotel, went above and beyond the call of duty."

[ANS thanks Ian, K8MM for the above information]

/EX

SB SAT @ AMSAT $ANS-338.08
Eagle Hardware Elements

AMSAT News Service Bulletin 338.08
From AMSAT HQ SILVER SPRING, MD.
December 4, 2005
To All RADIO AMATEURS
BID: $ANS-338.08

Fred, KF0AK, is a member of the team working on the building of the Eagle Modules. He has put some information on his web page about the hardware construction of the Eagle modules. Fred says he will try to update his site weekly.

See: http://www.paulbunyan.net/users/fparker

[ANS thanks Fred, KF0AK for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,

Dee Interdonato, NB2F
nb2f at amsat dot org

422. WSR-338 AMSAT Weekly Satellite Report

Newsgroup: rec.radio.amateur.space
Date: 2005-12-04 23:26:10 UTC
From: JoAnne Maenpaa <wb9jej_no-spam@earthlink.net>
Message-ID: <mWKkf.9857$wf.7140@newsread3.news.atl.earthlink.net>
Source record: 1886

This report is organized into 4 parts.
Part 1 - operational analog amateur satellites.
Part 2 - operational digital amateur satellites.
Part 3 - non - operational satellites
Part 4 - proposed satellites

SB SAT @ AMSAT <KB9MMC $ANS-338.S1
WSR 338 Part 1 12/04/2005

AMSAT NEWS SERVICE BULLETIN 338.S1 FROM AMSAT HQ
SILVER SPRING, MD, December 4, 2005
TO ALL RADIO AMATEURS
BID: $ANS-338.S1

VO-52 HAMSAT
Catalog Number: 28650
Launch Date: May 05,2005

Status: Testing
Current Mode: U/V - Dutch Transponder

Proposed frequencies:

Indian Transponder:
Uplink : 435.220 MHz to 435.280 MHz LSB/CW
Downlink: 145.870 MHz to 145.930 MHz USB/CW
Beacom : 145.859330 MHZ CW

Dutch Transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacon : 145.860MHz 12WPM with CW message

This from William Leijenaar, PE1RAH:
Dear AMSATs,

I wish I had the same free time now as when I designed the HAMSAT and P3e transponder. Unfortunatly these times have been changed (for the moment) due to QRL things.

However, I often try to be QRV on the HAMSAT and check the signals from my transponder and read the messages on amsat-bb. I just read about the beacon "problem". The "problem" with the beacon is actually not a problem but it is known. The beacon signal is injected at the IF, and runs throught the transponder from the IF section, up converter, via the final PA to the antenna.

The changes you hear on the beacon frequency is caused by the amplitude limit-
ers in the IF that are activated by a too strong uplink signal. These limiters
are only for protection, to avoid that the IF and VHF amplifiers get overload-
ed and generate all kinds of unwanted signals at the output.

My transponder is straight forward to keep it physical small and cheap in cost
(as I had no sponsors). Unlike most other transponders my transponder on HAM-
SAT has no AGC system. It gives always maximum gain with maximum sensitivity.
The main reason is that the AGC systems I had didn't fit in the small sized
box. As an option I choose for limiters, and it worked great in tests.

Secondly, I tought limiters might be helpfull against aligators. To deal with
too strong signals most transponder have an AGC to lower the RX gain, and act-
ually be helpfull to the alligators. With the limiters their SSB signal will
get distorted and they might lower their powers to have better audio quality.

The change in beacon sound is an indication for too much uplink powers and
will be heared mainly in areas where higher powers are available on the up-
link, like US, Europe, Japan...

Its funny to know that nobody here has discovered that the bandpass is shifted
some down in frequency... There is no technical failure, the reason is known
here... No panic please :o)

Please keep in mind that this transponder is my privat work and privat money.
Frankly speaking this is my privat transponder I "give" to the amateur world.
I was one of those many poor students, and this was the best I could do with
my resources I had available at that time... The whole thing is just 16cm x
10cm x 3cm !! even smaller than the professional Indian transponder :o)

I hope you all enjoy my transponder even when it is not perfect.
[11272005]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - V/U 9k6
VOICE REPEATER - V/U FM

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
Analog voice uplink: 145.880 MHZ FM
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

This from the AO-51 Command team:

5 Dec
FM Repeater, L/U
Uplink: 1268.700 mhz FM
Downlink 435.300 mhz FM

8 Dec (Wed Night)
9k6 Digital, V/U, High Power, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital

12 Dec
FM Repeater, V/S
Uplink: 145.920 mhz FM, No PL Tone
Downlink 2401.200 mhz FM

19 Dec
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital

[ANS-WSR thanks Mike Kingery, KE4AZN for the above information]
[11202005]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz (67.0 Hz PL tone) (See below for operating
procedures)
Downlink: 436.795 MHz

There have been unconfirmed reports on the amsat-bb remailer that SO-50 has
shifted downlink frequency as much as 5khz up. This both from Europe.

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary)

1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on
and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.
[09122004]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplink: 145.850 145.870 145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

John, N4QWL reports on July 16th, 2005:
Last evening I had a AOS to LOS qso with WI2W. FO-29 came up at 01:17z here in
FM07 and I found WI2W and we chatted until 01:33z. The satellite was at 2 degrees elevation when I finally heard him start to crackle a bit. What a great QSO! To think that I watched this bird launch back in 1996 and it is still working so well is a real thrill. I believe I still have the video. I might just look for it and watch it again. Boy do I love this satellite stuff!
Look for you all up there.

Please send the reception reports to lab2 'at' jarl.or.jp.
Please use the subject line: 'FO-29 reception report'.

Mineo, JE9PEL, has an FO-29 satellite telemetry analysis program that will automatically analyze all digital telemetry from the satellite (such as current, voltage and temperature). FO29CWTE is available at:
http://www.ne.jp/asahi/hamradio/je9pel/
[ANS-WSR wishes to thanks John, N4QWL for this week's report]
[11132005]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

The latest information on AO-27 from control operator Michael Wyrick, N3UC
(former N4USI), can be found at:
http://www.ao27.org

An AO-27 question-and-answer page is available on the AMSAT-NA web site,
with
updates by Ray, W2RS. The URL is:
http://www.amsat.org/amsat/intro/ao27faq.html

[ANS-WSR thanks John, K6YK, for this week's AO-27 report]
[11132005]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Semi-operational in sunlight.
Return to active status: June 21,2002

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A
145.975 to 145.925 MHz CW/USB Mode B
Beacon: 29.502 MHz, 145.972 MHz, 435.1 MHz, 2304.1 MHz

Emily, W0EEC has created a website to allow the users of AO-7 to record
contacts, observations and use of the satellite more effectively at:
http://www.emilyshouse.com/experthams/ao7/main.php
This includes the ability to log contacts.

Tim, K3TZ has written a program to decode AO-07 telemetry. The program can
be
downloaded at:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

For more AO-7 info:
http://www.amsat.org/amsat/sats/n7hpr/ao7.html
[11132005]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: DIGIPEATER
Digipeater: ACTIVE

The current Expedition 12 crew is:
Commander: William McArthur - KC5ACR
Flight Engineer: Valery Tokarev - (no call)

Worldwide packet uplink: 145.990 MHz FM
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM
Doppler Shift is 10 KHz

Russian callsigns: RS0ISS, RZ3DZR
USA callsign: NA1SS
Packet station mailbox callsign: RS0ISS-11
Packet station keyboard callsign: RS0ISS-3
Digipeater callsign: ARISS

The ISS Fan Club Webpage < http://www.issfanclub.com > reports that the
Digi-
peater is active as of Nov 14th, 2005 at 0207UTC.

The ISS daily crew schedule can be found at:
http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is
NOT
translated from Russian and posted.

More information is available at:
http://www.rac.ca/ariss
http://spaceflight.nasa.gov/station/reference/radio/
http://www.marexmg.org/fileshtml/unprotopage.html
http://www.issfanclub.com
http://oscar.dcarr.org/
[11132005]
NNNN
/EX

SB SAT @ AMSAT <KB9MMC $ANS-338.S2
WSR 338 Part 2 12/04/2005

AMSAT NEWS SERVICE BULLETIN 338.S2 FROM AMSAT HQ
SILVER SPRING, MD, December 4, 2005
TO ALL RADIO AMATEURS
BID: $ANS-338.S2

PCSAT2 ?0-??
Catalog Number: 25544
Launch Date: August 1, 2005

Status: Battery-saving mode
Current Mode: None

Digital Downlink: 435.275 Mhz
Digital Uplink: 145.825 Mhz
PSK-31 Downlink: 435.275 Mhz
PSK-31 Uplink: 29.400 - 29.403 Mhz

Broadcast:
BBS:

PCSAT2 was installed on the exterior of the International Space Station and
was activated on August 3, 2005.

Packets seen from PCSAT2 can be reviewed at:
http://www.findu.com/cgi-bin/pcsat2.cgi

A screen shot of both the 9600 bps and 1200 bps decoded data as seen by
Simon,
9W2QC, can be seen at:
http://www.9w2qc.net/pcsat2/

More information on PCSAT2 can be found at:
http://web.usna.navy.mil/~bruninga/pcsat2.html
[11272005}
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - V/U 9k6
VOICE REPEATER - V/U FM

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
Analog voice uplink: 145.880 MHZ FM
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

This from the AO-51 Command team:

5 Dec
FM Repeater, L/U
Uplink: 1268.700 mhz FM
Downlink 435.300 mhz FM

8 Dec (Wed Night)
9k6 Digital, V/U, High Power, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital

12 Dec
FM Repeater, V/S
Uplink: 145.920 mhz FM, No PL Tone

Downlink 2401.200 mhz FM

19 Dec
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital
[ANS-WSR thanks Mike Kingery, KE4AZN for the above information]
[11202005]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Operational

General Usage Uplink/Downlink:145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSat is a 1200-baud APRS digipeater designed for use by stations using
hand-held or mobile transceivers. Downlinks feed a central web site at:
http://pcsat.aprs.org

The APRS-equipped PCSat was built by midshipmen from the U.S. Naval Academy
under the guidance of Bob Bruninga, WB4APR.
[11272005]
=====
CUTE-1
Catalog number: 27844
Launched: June 30,2003

Status: Operational

Uplink: ?
Downlink: 436.8375 CW
437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)
Cliff, K7RR reports:
In the latest Weekly Satellite Report, CUTE 1, #27844 is listed as
OPERATIONAL?
Indeed it is very operational as a CUBESAT sending CW telemetry on
436.8345 MHz. At the July 7 2005, 23:45:20 pass over the Western USA:
CUTE 1 6B A4 xx 7F D7 66A8 4702 FF FF7C 65
CUTE 1 6C A6 59 80 D9 66A8 4702 FF FE7C B6

The June 30th KEPS were within ten seconds of AOS and LOS. It is an very
good object to practice tracking as the orbit and transmitter power are
similar to proposed CUBESATS awaiting launch this December. As a check
for Doppler correction, the lack of change in tone is an excellent
indicator.

CUTE 1 is a Japanese (Tokyo Institute of Technology) one kilogram
nanosatellite that was launched by a Rokot rocket from Plesetsk at
14:15 UT on 30 June 2003. It carries a 100 mW beacon at 436.8375 MHz.
Initial orbital parameters were period 101.4 min, apogee 831 km, perigee
819 km, and inclination 98.7?.

For further info about CUTE-1 goto:
http://lss.mes.titech.ac.jp/ssp/cubesat/operation/Schedule_e.html

[ANS WSR wishes to thank Cliff, K7RR, for this week's information]
[07242005]
=====
GO-32 TECHSAT-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
(435.325 n/a - temperature problems)
Uplinks: 145.850, 145.890, 145.930 FM
1269.700, 1269.800, 1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

Jeff, KB2M, reports November 15th, 2005:
I might be wrong about this, but as I am the only one I see working GO-32
here goes. If you do a DIR request up on the 145.890 uplink the bird turns
on. Give it a try....

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[ANS-WSR wishes to thank Jeff, KB2M for this weeks report.]
[11202005]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for
APRS users.

Uplink: 145.90 145.92 145.94 145.96 MHz FM
(using 1200-baud Manchester FSK)
Downlink: 437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon: 2401.1428 MHz
Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

A WOD collection of current graphics along with general information
and telemetry samples can be found at:
http://www.telecable.es/personales/ea1bcu
[05092004]
=====

UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational?

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK).
approx. 10 days ON, 10 days OFF
Mode-S Beacon: 2401.500 MHz. ... OFF
UHFBeacon: 435.025 MHz. ... OFF

During the period 24 September to 25 October 2005 the VHF beacon on 145.826MHz resumed transmissions, as expected, on 30 September, sometime between 06:05 and 06:42 UTC passes. Reasonable signals were also captured on the 17:44 pass, later that day. However by the 16:49 UTC pass on 02 October, the beacon had switched OFF. Transmissions resumed on 21 October, and should continue until around 31 October.

The on-board clock continues to show a very large error. Currently it is 19.2394 days slow, having lost six hours while the beacon was last OFF, ie. between 02 October and 21 October. When the beacon is ON, the clock is stable to within a few seconds.

All the analogue telemetry channels, 0 to 59 are zero, ie they have failed. The status channels 60 to 67 are still working.

The eclipses have now ended, and the satellite should be in continuous sunlight for the remainder of this year, and well into next year. This should help the satellite to continue transmitting, although continuous sunlight can cause problems due to excessive temperatures.

The watchdog timer appears to be operating on the 20 day cycle, ie. approximately ten days ON followed by 10 days OFF. It appears to be uneffected by problems of the on-board clock. However, poor solar attitude, and battery problems, may be combining to produce a low line voltage. This causes the beacon to switch OFF premeaturely, and resets the watchdog timer cycle.

The Beacon frequencies are -
VHF 145.826 MHz. AFSK FM ASCII Telemetry
UHF 435.025 MHz. OFF
S-band 2401.5 MHz. OFF

Listeners to OSCAR-11 may be interested in visiting my website which contains
an archive of news & telemetry data. It also contains details about using a soundcard or hardware demodulators for data capture. There is software for capturing data, and decoding ASCII telemetry. The URL is:

www.users.zetnet.co.uk/clivew/

If you place this bulletin on a terrestrial packet network, please use the bulletin identifier $BID:U2RPT114.CWV, to prevent duplication.

More information on UO-11 OSCAR-11 can be found at:
http://www.users.zetnet.co.uk/clivew/

MPEG3 files can be found here at Mineo, JE9PEL website:
http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[ANS-WSR thanks Clive G3CWV for the above information]
[10302005]
NNNN
/EX

SB SAT @ AMSAT <KB9MMC $ANS-338.S3
WSR 338 Part 3 12/04/2005

AMSAT NEWS SERVICE BULLETIN 338.S3 FROM AMSAT HQ
SILVER SPRING, MD, December 4, 2005
TO ALL RADIO AMATEURS
BID: $ANS-338.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

SSETI ?O-??
Catalog Number: 28894
Launch Date: October 27, 2005

Status: In orbit - being commissioned

A daily report of the launch campaign is being maintained at
http://sseti.gte.tuwien.ac.at/express/mop/index.php?uri=news.html
This mission operations site is completely up-to-date regarding Kepler TLEs
and other LEOP "Launch and Early Operations Phase" details.

The SERACC software, needed to decode and submit the received data to the
SSETI database, together with some audio files containing recorded 9k6
signal
to experiment with is also now available

The ESA website about SSETI Express is at:
http://www.esa.int/SPECIALS/sseti_express/SEMARJ7X9DE_0.html

The latest version of the SSETI Express handbook can be downloaded free
of charge from the AMSAT-UK website at:
http://www.uk.amsat.org/

More SSETI Links at:

SpaceDaily has a report about SSETI at:
http://www.spacedaily.com/news/internet-04zzzu.html

You can find more info about SSETI at:
http://sseti.gte.tuwien.ac.at/WSW4/

Latest news about SSETI can be found at:
http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php

Look at the website for the SSETI Express webcam
http://sseti.gte.tuwien.ac.at/WSW4/webcam.htm

[ANS-WSR thanks Graham, UA/G3VZV and Trevor, M5AKA for the above]
[11202005]
======
POSAT-1 PO-28
Catalog Number: 22829
Launched : September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 435.250 MHz
435.275 MHz

Uplink: 145.925 MHz
145.975 MHz

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

PO-28 (POSAT-1), Portugal's first satellite, launched 12 years ago,will be turned over to Amateur Radio use in the very near future. That was the word July 30 from AMSAT-UK Secretary Jim Heck, G3WGM, during the AMSAT-UK International Space Colloquium in Guildford, England.

Launched September 25, 1993, the satellite operated as a packet store-and-forward BBS (9600 baud FM FSK) on Amateur Radio frequencies for several weeks in early 1994. Over the years, PO-28's primary usage has been commercial, although plans have called for eventually shifting its operation to ham radio use. G3WGM reports that following lengthy negotiations it has been agreed thatthe satellite can be switched permanently to amateur frequencies. The change over is expected to take a couple of weeks.

The Portuguese satellite was built at the University of Surrey as part of a collaborative satellite technology program that involved industry and academe. Uplink frequencies will be 145.925 and 145.975 MHz. Downlink frequencies will be 435.250 and 435.275 MHz. More information on PO-28 is on the AMSAT Web site

http://www.amsat.org/amsat/sats/n7hpr/po28.html.

Uplink Frequencies: 145.925 and 145.975 MHz
Downlink Frequencies: 435.250 and 435.275 MHz

Orbit: 822 x 800 km, 98.6 deg inclined, sun-synchronous.

Transponder capabilities include FM repeater and 38k4 data. If you want to hear how loud this satellite is, listen on 429.950 until the change back to amateur radio service.

Keplerian elements for PO-28 are currently contained in the AMSAT keps bulletins and at Celestrak in amateur.txt using the name "POSAT". Users of Space Track should query the NORAD Satellite ID number 22829. The name listed by Space Track is "EYESAT A".

More information of POSAT-1 can be found at:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
http://www.amsat.org/amsat/sats/n7hpr/po28.html
[ANS-WSR wishes to thank Duane Naugle, KO6BT, for this week's update.]
[11062005]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon: 145.810 MHz (unmodulated carrier)

AO-10 has been locked into a Mode-B, 70-cm uplink and
2-meter downlink for several years.

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Non-operational

Uplink: 145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink: 435.812 MHz SSB
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Alberto E. Zagni - I2KBD reports on 02/13/05
The spacecraft is in MBL (safe mode) and is trasmitting just 6 channels
of telemetry. Temperatures and voltage are nominal, but there seems to
be a problem with the onboard receiver, refusing to accept commands.
The spacecraft was launched in 1993, thus nearing 12 years in orbit...

Best regards
Alberto E. Zagni - I2KBD
ITAMSAT Mission Director

More information of IO-26 can be found at:

http://joshua.micronet.it/english/itamsat/itamsathome.html
http://www.amsat.org/amsat/sats/n7hpr/io26.html
www.itamsat.org

[02132005]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon: 29.408 MHz
Robot: 29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB
Beacon: 145.860 MHz
Robot: 145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB
Beacon: 29.352 MHz (intermittent)
SSB meeting frequency: 29.380 MHz (unofficial)

John, KD6PAG reports on June 16, 2004 to WSR:
RS-15 beacon seemed to be back in the mode where it's a tone about 5
seconds off and then 5 seconds on this morning.

WSR is looking for more confirmations of RS-15 coming back.

[ANS-WSR thanks John, KD6PAG for RS-15 information]
[06202004]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplink: 145.84 145.86 145.88 145.90 MHz FM
(using 1200-baud Manchester FSK)
CW downlink: 437.125 MHz
Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)
Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM
Broadcast Callsign: HLO1-11
BBS: HLO1-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a
non-operational status.
[05092004]
=====

KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM (9600-baud FSK)
Downlink: 436.500 MHz FM
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink frequency (listed on the PanSat web site) 436.500 MHz

The satellite is not available for general uplink transmissions.

The Naval Postgraduate School developed PanSat. At the time of
launch, PanSat spread-spectrum digital transponders were to
be available to Amateur Radio operators along with software to utilize
this technology.

The satellite is still operating, however, the spread spectrum packet
radio portion never took place. The spacecraft is now beyond it's
initial 2-year mission life, but telemetry records are still being
downloaded.

For more information, visit the official PanSat web site at:
http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS-WSR has no further information]
[05232004]
=====
SO-35 SUNSAT

Catalog Number: ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlink: 437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA
web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplink V-band 145.840 - 145.990 MHz CW/LSB
U-band 435.550 - 435.800 MHz CW/LSB
L1-band 1269.250 - 1269.500 MHz CW/LSB
L2-band 1268.325 - 1268.575 MHz CW/LSB
S1-band 2400.350 - 2400.600 MHz CW/LSB
Downlink: S2-band 2401.225 - 2401.475 MHz CW/USB
K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon: 2401.323, 24,048.035
[05232004]

SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational
Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz
Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
callsign KE6QMD, as per the user service agreement located at the
following
URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink: 145.850 or 145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz
Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[11202005]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Semi-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

AO-49 (SAFIR-M) is a German amateur radio payload onboard the small German
scientific satellite "RUBIN-2".

AO-49 was built by the German amateur radio association "AATiS e.V." (German
acronym for "Arbeitskreis Amateurfunk und Telekommunikation in der Schule",
which means: 'working group for amateur radio and telecommunications in
schools'). AO-49 is designed as a "store and broadcast" system for APRS
based
messages, dedicated for the use of schools in combination with the existing
WX-Net and planned buoy experiments in Germany.

No transmissions detected since the 1st of February 2003! It appears AO-49
is
not properly aligned to illuminate the solar panels. This should end soon.
Due
to its orbit, AO-49 will be in a phase without eclipses until 13Feb03.

Martin DG8UAU has written a small software program "SAFIR-M Decoder" to
allow
decoding of the received DATA0 frames. It is available at:
http://amend.gmxhome.de in the section Aktuelles.

Details on AO-49 (SAFIR-M) can be found at:
http://amend.gmxhome.de

Information about AATiS e.V. is available at:
http://www.aatis.de
[11132005]
NNNN
/EX

SB SAT @ AMSAT <KB9MMC $ANS-338.S4
WSR 338 Part 4 12/04/2005

AMSAT NEWS SERVICE BULLETIN 338.S4 FROM AMSAT HQ
SILVER SPRING, MD, December 4,2005
TO ALL RADIO AMATEURS
BID: $ANS-338.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE
PROPOSED FOR LAUNCH AT THIS TIME:

UCISAT ?O-??
Catalog number:
Proposed Launch Date: October 31, 2005

Status: Under Construction

Downlink: Submission in Progress
Uplink: Submission in Progress
Callsign: Submission in Progress
[11272005]
=====
PHASE 3E ?O-??
Catalog Number:
Proposed Launch Date: Early 2006

Status: Under Construction

For the latest project status update please visit the AMSAT-DL
P3-E web page:
http://www.amsat-dl.org/p3e/

[ANS-WSR wishes to thank William Leijenaar, PE1RAH for this week's report]
[10022005]
=====
CP1 ?o-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N6CP
Proposed Transmit Frequency: 436.845
[03272005]
=====
CP2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.325
[03272005]
=====
HAUSAT1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: D90HP
Proposed Transmit Frequency: 437.465
[03272005]
=====
ICE Cube 1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: W2CXM
Proposed Transmit Frequency: 437.305
[03272005]
=====
ICE Cube 2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N2VR
Proposed Transmit Frequency: 437.425
[03272005]
=====
ION ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.505
[03272005]
=====
KUTEsat ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: KC0RMW
Proposed Transmit Frequency: 437.385
[03272005]
=====
MEROPE ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: K7MSU-1
Proposed Transmit Frequency: 145.980
[03272005]
=====
nCUBE1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
2407.25
[03272005]
=====
RINCON ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
437.345
[03272005]

=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SEEDS ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: JQ1YGU
Proposed Transmit Frequency: 437.485
[03272005]
=====
Mea Huaka ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.405
[03272005]
=====
SUITSAT ?O-??
Catalog Number:
Proposed Release Date: December 8th, 2005

Proposed Callsign: RS0RS ?
Proposed Transmit Frequency: 145.990

This from Frank, KA3HDO:
I have recieved information that the Russian EVA that will deply SuitSat,
planned for December 8th, has been delayed to late January/Early February
2006. As we get more information, we will post it.

[ANS-WSR wishes to thank Frank Bauer, KA3HDO for this weeks report]
[11272005]
NNNN
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ANS is released worldwide via the AMSAT ANS e-mail reflector and a live
radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz.
Pre-net operations start at 18:00 UTC, with current ANS bulletins trans-

mitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James K. Darrow, KB9MMC.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

423. Re: WSR-338 AMSAT Weekly Satellite Report

Newsgroup: rec.radio.amateur.space
Date: 2005-12-05 16:01:26 UTC
From: Falky foo <falkyfoo@bonksbcglobal.net>
Message-ID: <qvZkf.22969$BZ5.1207@newssvr13.news.prodigy.com>
Source record: 1887

JoAnne, your satellite reports make me warm.

424. Radio Meteor Obs. Bull. November 2005

Newsgroup: rec.radio.amateur.space
Date: 2005-12-07 19:35:27 UTC
From: Chris Steyaert <observations@rmob.org>
Message-ID: <uaeep1h0dst0kbfl47b2vjvf3qiruiqp8t@4ax.com>
Source record: 1888
Cross-posted to: rec.radio.amateur.space,sci.astro.amateur

Radio Meteor Observation Bulletin No. 148 of November 2005 (70 K) is available now as

http://visualrmob.free.fr/rmobtext/rmob0511.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

http://radio.data.free.fr

Chris

425. for sale

Newsgroup: rec.radio.amateur.space
Date: 2005-12-11 06:32:39 UTC
From: sympatico <bitsplice@hotmail.com>
Message-ID: <_GPmf.11859$kt5.1078457@news20.bellglobal.com>
Source record: 1889

I have the following for sale, all equipment is working.

ICom IC910H with 1.2gig module
2 - 13 element VHF beams
2 - 26 element UHF beams
1 - 29 element UHF beam
1 - 2 way VHF splitter
1 - 2 way UHF splitter
1 - NEW 2.4gig DEM (Down East Microwave) down converter
1 - NEW Yeasu elevation rotor and controller
1 - Hygain Ham IV rotor with controller

Anyone interested please contact me at VE3WDW@rac.ca I am located in Ontario just outside Toronto.

I also have a 60 foot commercial grade tower (weighs about 600 pounds) and a heavy duty 25 foot mast (2.5 inches .25 wall schedule 80, weighs about 175 lbs). Tower and pole are on the ground.

Thanks

VE3WDW

426. PROCO linear amplifiers for 1296 MHz...

Newsgroup: rec.radio.amateur.space
Date: 2005-12-11 18:15:06 UTC
From: Rightrik <gaggiorNOSPAM@tin.it>
Message-ID: <4038l5F16iceiU1@individual.net>
Source record: 1890

Hello, where can i find informations about PROCO linear amplifiers for 1296 MHz band?

I've tried with Google, but i found almost nothing...

Thank you,
73 de Riccardo IK5WQO

427. invitation to join Space Education Network yahoo group

Newsgroup: rec.radio.amateur.space
Date: 2005-12-12 03:31:47 UTC
From: Mabon <mathew11@zoominternet.net>
Message-ID: <Xns9729E448EDA89mathew11zoominternet@38.119.71.210>
Source record: 1891

http://groups.yahoo.com/group/spaceeducationnetwork/

-----== Posted via Newsfeeds.Com - Unlimited-Unrestricted-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! 120,000+ Newsgroups
----= East and West-Coast Server Farms - Total Privacy via Encryption =----

428. ANS-345 AMSAT News Service Weekly Bulletin

Newsgroup: rec.radio.amateur.space
Date: 2005-12-12 15:38:07 UTC
From: JoAnne Maenpaa <wb9jej_no-spam@earthlink.net>
Message-ID: <zPgnf.2862$nm.1827@newsread2.news.atl.earthlink.net>
Source record: 1892

AMSAT NEWS SERVICE
ANS-345

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:

* AMSAT President's Letter for December 2005
* Straight Key Night on OSCAR 2006
* PCSAT2 Operations Guidance II
* ARISS Status December 5, 2005
* New Items at the AMSAT Online Store
* KO4MA Announces Possible Satellite Operation from KG4
* Houston AMSAT Net Moves Satellites
* N5AFV Announces FM Satellite DXpedition

SB SAT @ AMSAT $ANS-345.01
AMSAT President's Letter for December 2005

AMSAT News Service Bulletin 345.01
From AMSAT HQ SILVER SPRING, MD.
December 11, 2005
To All RADIO AMATEURS
BID: $ANS-345.01

Fellow AMSAT Members,

I am quite pleased as AMSAT's Executive Vice President to have the opportunity to fill in on this month's President's Letter while Rick, Barry and Gunther are hard at work on various fundraising activities for AMSAT.

It is a very exciting time to be a member and supporter of AMSAT. One part of AMSAT's Vision is a constellation of High Earth Orbit (HEO) satellites. To accomplish this, it was recognized that the old method of working on single satellites in a serial fashion would not work and that several satellites would need to be constructed in parallel. That is exactly what is now beginning to happen with AMSAT-DL's P3E and AMSAT-NA's Eagle projects.

Over the recent Thanksgiving holiday weekend, AMSAT President Rick Hambly, W2GPS, VP of Engineering, Dr. Bob McGwier, N4HY and Dr. Al Katz, K2UYH, President of Lintech and professor of electrical engineering at College of New Jersey, hosted a meeting for several radio amateurs and a student to tackle some of the RF parts of AMSAT-NA's Eagle project.

The attendees included:

Dr. Tom Clark, W3IWI, AMSAT-NA chief scientist
Paul Drexler, W2PED, Microwave R.F. designer
Matt Ettus, N2MJI, Gnu Radio project co-leader and designer of the USRP (universal software radio peripheral)
Dr. Marc Franco, N2UO, Lintech, Inc. Engineer
Steve Hendricksen, EE student at the College of New Jersey
Jan King, W3GEY/VK4GEY, AMSAT founder, former VP Engineering, and former board member
Paul Wade, W1GHZ, well know Microwave engineer whose web based microwave handbook is read the world over.
Marc Zaharchuk, WA3CRM, Lockheed Space RF Engineer

Rick, W2GPS, got the meeting started with an overview of the project, our organization and the goals of Eagle. Bob, N4HY, then discussed the overall RF requirements for the spacecraft, including the use of SDX as the primary linear transponder with the need to plan for an all-analog backup and for command receivers. Tom, W3IWI, then gave a detailed analysis on the C-C Rider phased array of patches. Matt, N2MJI, talked about Gnu Radio, the Universal Software Radio Peripheral, and his proposal for the CC Rider ground station which has been generously funded by Phil Karn, KA9Q.

As a result of the weekend, Marc, N2UO, who has years of RF experience including amplifiers in space, has signed up to do the envelope restoration (HELAPS) transmitters. John Stephensen, KD6OZH, has signed up to lead the receiver development and is working first on the 70 cm receiver. Paul, W1GHZ, has agreed to design a critical component for CC Rider, the bandpass filter that will be needed to allow the transmitter and receiver to share antennas. Finally, Al Katz, K2UYH, President of Lintech, Inc. has graciously offered to host an RF facility for the AMSAT Eagle project at Lintech in Hamilton, NJ. This provides the Eagle RF team with access to a large collection of lab/test equipment and a first class clean room facility for the development, construction and testing of Eagle's RF modules.

The RF group is not the only part of the Eagle Team making progress. The mechanical and structural group is also hard at work on the modules and spaceframe for Eagle.

One of the challenges in a project as complex as Eagle is managing all the data. During the Eagle Team meeting in Pittsburgh the concept of using a Wiki based system was discussed. From that discussion Emily, W0EEC, implemented Eaglepedia, which will enhance the updating and sharing of information on a scale never before seen on any AMSAT project. Eagle team members are already uploading files and information and pending resolution of a few outstanding security issues, Eaglepedia will be linked to the AMSAT website.

While all this exciting activity is going on within the Eagle team, AMSAT-DL is also making steady progress on their P3E satellite. As I'm writing this several AMSAT-NA members are in Germany working on the IHU-3 and other modules for P3E. More details about the results of this meeting will be coming soon.

There is a lot of hard work being done by a lot of volunteers in many different locations. All this effort needs your support to maintain the building momentum. There are many ways to show your enthusiasm for getting these HEO satellites built. Join the President's Club, donate directly to the project of your choice, join or renew your AMSAT membership. All of these can be done through the mail, web site or a phone call to Martha in the AMSAT office.

73,
Lee McLamb, KU4OS
AMSAT Executive Vice President

[ANS thanks Lee, KU4OS for the above information]

/EX

SB SAT @ AMSAT $ANS-345.02
Straight Key Night on OSCAR 2006

AMSAT News Service Bulletin 345.02
From AMSAT HQ SILVER SPRING, MD.
December 11, 2005
To All RADIO AMATEURS
BID: $ANS-345.02

Once again, AMSAT-NA is pleased to sponsor Straight Key Night on OSCAR for enjoyment by all radio amateurs.

OSCAR SKN 2006 will run for 24 hours, 0000-2400 UTC, on 1 January 2006. It's very simple: no rules, no scoring, and no need to send in a log. Just operate CW through any OSCAR satellite using a straight hand key, working as many other SKN participants as you can. Contacts via the moon (OSCAR Zero) count too.

As in past years, all participants are requested to nominate one of the operators they worked for "Best Fist" recognition. Your nominee need not have the best fist of those you heard, just of those you worked.

Please send all nominations to Ray Soifer via w2rs@arrl.net (Note the new address. Ray's old address, w2rs@amsat.org, only works sporadically now due to ISP problems.)

A list of those nominated will be published via the AMSAT News Service in early February, and in The AMSAT Journal.

[ANS thanks Ray, W2RS for the above information]

/EX

SB SAT @ AMSAT $ANS-345.03
PCSAT2 Operations Guidance II

AMSAT News Service Bulletin 345.03
From AMSAT HQ SILVER SPRING, MD.
December 11, 2005
To All RADIO AMATEURS
BID: $ANS-345.03

Bob, WB4APR passed along the following info concerning PCSAT2 operations:

Since the purpose of the PCSAT series of amateur satellites is to encourage the development of more satellites for mobile communications, we decided to further modify the recommended operations plan for PCSAT2 to allow some testing from mobiles in the user service agreement. See: http://www.ew.usna.edu/~bruninga/pec/useragreemt.txt

We added paragraph 1b below:

1) PCSAT2 is for users and data applications. It is NOT for UNATTENDED beaconing of fixed text from fixed stations... except for remote data or environmental sensor experiments at low rates...

1b) However, since the PCSAT series of satellites were designed [to] promote a... capability for mobiles, the unattended beaconing from a vehicle at a 5 minute rate for the purpose of assessing antenna or success statistics is authorized.

The caution still applies, however, IF PCSAT2 is using its 2m downlink on 145.825, to make sure you are not transmitting during a pass when the ISS crew is using voice.

Our goal is to have enough Amateur Satellites always listening on 145.825 AX.25 packet to relay short position and message data from mobiles anywhere on the planet, especially when they are out of range of the installed terrestrial packet infrastructure and Internet.

We also need more unattended ground stations listening on the PCSAT2 downlinks and feeding the data into the global APRS Internet system. If you have a spare receiver, and a TNC, you are welcome to put it on either of these downlinks: 435.275 routine (PC2), or 145.825 (PC1 and sometimes PC2), or 145.825 for ARISS.

PCSAT callsigns:

Notice that the currently active calls are PCSAT-1 on NO-44 also called PCsat, and PCSAT2 (no SSID) which is on ISS.

The callsign PCSAT-2 is also on board PCsat but it is only used for 9600 baud packet downlink and so is not involved in this current exercise. I see some stations trying to use the call PCSAT-2 and it will not work at this time.

As stated above, our goal is to have enough Amateur Satellites always listening on 145.825... and with both PCSAT-1 and PCSAT2 operating on the

same channel that is giving most of us 12 passes a day to experiment with.

The goal is for a distant traveler in the wilderness to be able to get a message out a few times a day and for travelers to get their position out about once a day via this system. We think that with 3 or 4 satellites in orbit and travelers beaconing once every 10 minutes while on such expeditions, that at least one report per day will get back to civilization.. This could support hundreds of amateur radio wilderness travelers PER footprint.

[ANS thanks Bob, WB4APR for the above information]

/EX

SB SAT @ AMSAT $ANS-345.04
ARISS Status December 5, 2005

AMSAT News Service Bulletin 345.04
From AMSAT HQ SILVER SPRING, MD.
December 11, 2005
To All RADIO AMATEURS
BID: $ANS-345.04

1. Massachusetts Contact Successful

On November 29, seventeen students from Hawthorne Brook Middle School in Townsend, Massachusetts each asked a question of Bill McArthur, KC5ACR. One hundred students, teachers, parents, and administrators, including the district superintendent, attended. Among the seven media representatives who covered the event were those from four newspapers: Worcester Telegram, Townsend Times, Community Journal, and Groton Herald.

An article in the Community Journal is available for viewing by subscribers only until the article is one week old, at which time the entire article may be viewed by non-subscribers as well. See:
http://www.thecommunityjournal.com/news/2005/1202/Townsend/034.html

One of the sixth graders present for the contact, (who did not ask a question), remarked afterwards, "I'll remember this for the rest of my life."

2. Canadian School Contact Successful

Students from the Ralph McCall School in Airdrie, Alberta, Canada experienced a successful contact with the ISS on Friday, December 2. Bill McArthur, KC5ACR, answered 18 questions posed to him by eighteen students. The audience was comprised of 920 students from Ralph McCall, and 140 from the Chestermere School. Many dignitaries attended: Member of Parliament Myron Thompson, the Superintendent of Schools, one associate superintendent, a local School Board trustee, the mayor of the city of Airdrie, 4 City Councilors, Alberta education representative from the Emerging Technologies branch, and local high school principals. In addition, the principal from Sir James Lougheed Elementary School, the next Alberta school scheduled for an ARISS contact, also attended. The contact received extensive media

coverage. CBC (Canadian Broadcasting Corporation) 24 hour news channel, Newsworld, CBC local television, CBC radio, CTV news local affiliate, City TV, Global TV, Calgary Sun, Calgary Herald, 3 local Airdrie and area newspapers, and a Reuters writer all covered the event.
The CBC posted a story on its website, "Space station astronaut takes call from Alberta students." See:
http://www.cbc.ca/story/science/national/2005/12/02/astronauts-school051202.html

This contact was carried live on the IRLP 9010 Discovery Reflector, and through streaming audio (shoutcast) on its companion website. Echolink was also used, and twelve connections were made from the following countries: Thailand, the U.K., the U.S.A., and Germany.

3. Russian Contact Successful

On Thursday, November 24, school children in Star City, Russia, had a successful contact with the ISS via amateur radio. Among the audience attending the event were students, representatives from the Gagarin Cosmonaut Training Center (GCTC) and other cosmonauts.

4. Central Park Contact Update

On November 23, students from the Central Park Middle School in Schenectady, New York spoke with Bill McArthur, KC5ACR, on board the ISS. Fifty students, teachers, parents and others attended. Four television stations covered the event, broadcasting the contact to approximately 500,000. The Albany Times Union scheduled an interview with the school's public relations officer. The school is currently working with the Schenectady Amateur Radio Association and its after-school program to begin a ham radioclubforstudents.

5. ARRL Article on ESA CERN and New York Contacts

ARRL wrote a web story on the ESA CERN and Central Park contacts entitled, "Spacewalks 'Thrilling,' Astronaut Tells Students during Ham Radio Chat." See:
http://www.arrl.org/news/stories/2005/11/30/1/?nc=1

6. ARRL Article on PCSAT2

On November 29, ARRL ran an article on PCSAT. "PCSat, PCSat2 operational information announced," may be found at: http://www.arrl.org/

7. SuitSat Status

The Russian EVA to deploy SuitSat has been delayed. The new tentative date for EVA/deployment is February 2, 2006.

8. McArthur Active on ISS Ham Radio System

Astronaut Bill McArthur, KC5ACR, continues to thrill the amateur radio community as he makes general contacts via the ISS Ham radio system. He was active on November 30 over the U.S., and again on December 1 over South America. He made additional contacts with stations in the U.S. over the

December 3 - 4 weekend.

On December 1, ARRL posted a story on McArthur's contacts over the Thanksgiving holiday. "ISS commander cheers for Army in contact with Naval Academy's W3ADO" may be found at: http://www.arrl.org/

In anticipation of the Army-Navy game, held on Saturday, December 3, Bill transmitted a message via the ISS Ham packet radio system's beacon which read, "Go Army! Beat Navy!"

9. Astronaut Training Status

Congratulations to astronaut Michael Lopez-Alegria, who on Wednesday, November 30, passed his amateur radio license exam.

10. Italian Astronaut Visits with School Children

On November 9, students from the Istituto Comprensivo F. Negri in Casale Monferrato, Italy, had the opportunity to speak with Bill McArthur, KC5ACR, on board the ISS. On November 28, Italian astronaut Roberto Vittori, IZ6ERU attended a conference in Casale Monferrato and met with three students, ages 10-11, from the Negri Institute, adding to the excitement of their space contact. Vitorri participated in two of his own ARISS contacts in April 2005 with the Marconi and Malignani Institutes in Civitavecchia and Palmanova, respectively, and the winning school of the ESA competition in ESRIN, Frascati, Italy, during his Eneide Mission on the ISS.

[ANS thanks Carol, KB3LKI for the above information]

/EX

SB SAT @ AMSAT $ANS-345.05
New Items at the AMSAT Online Store

AMSAT News Service Bulletin 345.05
From AMSAT HQ SILVER SPRING, MD.
December 11, 2005
To All RADIO AMATEURS
BID: $ANS-345.05

Many new items have been added to the AMSAT Online Store.

In addition to the 2005 Wall Clock with weather station, there is now a 2005 Desk Clock with weather station. Either clock is a really nice addition to your home, office or ham shack.

The 2005 23rd AMSAT Symposium Proceedings with all the articles that were to be presented at Lafayette is available for purchase.

A must have item, the 2004 22nd AMSAT Symposium DVD is also available. A year in the making, the DVD contains all of the proceedings, board of directors minutes, video, and audio of all the presentations and much, much more.

These items and more can be purchased with your donation at
http://www.amsat.org and click on AMSAT Online Store.

[ANS thanks Bruce, KK5DO for the above information]

/EX

SB SAT @ AMSAT $ANS-345.06
KO4MA Announces Possible Satellite Operation from KG4

AMSAT News Service Bulletin 345.06
From AMSAT HQ SILVER SPRING, MD.
December 11, 2005
To All RADIO AMATEURS
BID: $ANS-345.06

Drew, KO4MA wants to give amateur stations a "heads up" in regards to a possible Caribbean satellite operating opportunity.

Drew wrote, "This is still somewhere between tentative and confirmed, but it looks like I'm going to be in KG4 from the evening December 14 to December 18. If I can secure the license upon arrival, I'll try to be QRV in the evenings and possibly early morning passes."

The best bet will be to look on SO-50, FO-29, and VO-52. Drew says he will post his latest updates on the AMSAT-BB.

[ANS thanks Drew, KO4MA for the above information]

/EX

SB SAT @ AMSAT $ANS-345.07
Houston AMSAT Net Moves Satellites

AMSAT News Service Bulletin 345.07
From AMSAT HQ SILVER SPRING, MD.
December 11, 2005
To All RADIO AMATEURS
BID: $ANS-345.07

The Houston AMSAT Net, still on the W0KIE radio network, can now be heard on Intelsat Americas 6, 93 degrees West, Transponder 1, 6.2 and 6.8 MHz wideband audio.

[ANS thanks Bruce, KK5DO for the above information]

/EX

SB SAT @ AMSAT $ANS-345.08
N5AFV Announces FM Satellite DXpedition

AMSAT News Service Bulletin 345.08
From AMSAT HQ SILVER SPRING, MD.
December 11, 2005
To All RADIO AMATEURS
BID: $ANS-345.08

Allen, N5AFV says he is pleased to announce that he will be bringing his FM satellite gear on a cruise ship sailing from Port Everglades, FL to the island of Dominica and back. He plans to work the FM birds AO-27, SO-50 and AO-51 using his Icom W32A HT and an AL800 telescoping antenna.

While Allen plans shipboard operation, and has done so successfully in the past, there is always the possibility that he will not be allowed to operate from the ship. If that happens, Allen will try to operate onshore at the ports of call where he can do so.

Itinerary
Dec 17, Leave Port Everglades, FL, 1700 EST
Call signs N5AFV and N5AFV/C6A
Dec 18, Nassau, Bahamas, 0800-1600 local time
Call sign N5AFV/C6A
Dec 19, At Sea
Call sign N5AFV/C6A
Dec 20, San Juan, PR, 1300-2300 local time
Call sign KP4/N5AFV
Dec 21, St. Thomas, USVI, 0800-1700 local time
Call sign KP2/N5AFV
Dec 22, Dominica, 1200-1900 local time
Call sign J79AFV
Dec 23, St. Barts, 0800-2300 local time
Call sign FJ/N5AFV
Dec 24, Tortolla, BVI, 0800-1500 local time
Call sign VP2V/N5AFV
Dec 25, At Sea
Call sign N5AFV/C6A
Dec 26, At Sea
Call sign N5AFV/C6A
Dec 27, Arrive Port Everglades, FL, 0700 EST
Call sign N5AFV

[ANS thanks Allen, N5AFV for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Al Marote, WA1LBG
wa1lbg at amsat dot org

429. WSR-345 AMSAT Weekly Satellite Report

Newsgroup: rec.radio.amateur.space
Date: 2005-12-12 15:38:11 UTC
From: JoAnne Maenpaa <wb9jej_no-spam@earthlink.net>
Message-ID: <DPgnf.2863$nm.309@newsread2.news.atl.earthlink.net>
Source record: 1893

This report is organized into 4 parts.
Part 1 - operational analog amateur satellites.
Part 2 - operational digital amateur satellites.
Part 3 - non - operational satellites
Part 4 - proposed satellites

SB SAT @ AMSAT <KB9MMC $ANS-345.S1
WSR 345 Part 1 12/11/2005

AMSAT NEWS SERVICE BULLETIN 345.S1 FROM AMSAT HQ
SILVER SPRING, MD, December 11, 2005
TO ALL RADIO AMATEURS
BID: $ANS-345.S1

VO-52 HAMSAT
Catalog Number: 28650
Launch Date: May 05,2005

Status: Testing
Current Mode: U/V - Dutch Transponder

Proposed frequencies:

Indian Transponder:
Uplink : 435.220 MHz to 435.280 MHz LSB/CW
Downlink: 145.870 MHz to 145.930 MHz USB/CW
Beacom : 145.859330 MHZ CW

Dutch Transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacon : 145.860MHz 12WPM with CW message

This from William Leijenaar, PE1RAH:
Dear AMSATs,

I wish I had the same free time now as when I designed the HAMSAT and P3e transponder. Unfortunatly these times have been changed (for the moment) due to QRL things.

However, I often try to be QRV on the HAMSAT and check the signals from my transponder and read the messages on amsat-bb. I just read about the beacon "problem". The "problem" with the beacon is actually not a problem but it is known. The beacon signal is injected at the IF, and runs throught the transponder from the IF section, up converter, via the final PA to the antenna.

The changes you hear on the beacon frequency is caused by the amplitude limiters in the IF that are activated by a too strong uplink signal. These limiters are only for protection, to avoid that the IF and VHF amplifiers get
overloaded and generate all kinds of unwanted signals at the output.

My transponder is straight forward to keep it physical small and cheap in cost (as I had no sponsors). Unlike most other transponders my transponder on
HAM-SAT has no AGC system. It gives always maximum gain with maximum sensitivity.

The main reason is that the AGC systems I had didn't fit in the small sized box. As an option I choose for limiters, and it worked great in tests.

Secondly, I tought limiters might be helpfull against aligators. To deal with too strong signals most transponder have an AGC to lower the RX gain, and
actually be helpfull to the alligators. With the limiters their SSB signal will
get distorted and they might lower their powers to have better audio quality.

The change in beacon sound is an indication for too much uplink powers and will be heared mainly in areas where higher powers are available on the up-link, like US, Europe, Japan...

Its funny to know that nobody here has discovered that the bandpass is shifted some down in frequency... There is no technical failure, the reason is known here... No panic please :o)

Please keep in mind that this transponder is my privat work and privat money. Frankly speaking this is my privat transponder I "give" to the amateur
world. I was one of those many poor students, and this was the best I could do with my resources I had available at that time... The whole thing is just 16cm x 10cm x 3cm !! even smaller than the professional Indian transponder :o)

I hope you all enjoy my transponder even when it is not perfect.
[11272005]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - V/U 9k6
VOICE REPEATER - V/U FM

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
Analog voice uplink: 145.880 MHZ FM
145.920 MHz FM 67Hz PL tone

1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

This from the AO-51 Command team:

12 Dec
FM Repeater, V/S
Uplink: 145.920 mhz FM, No PL Tone
Downlink 2401.200 mhz FM

19 Dec
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital

[ANS-WSR thanks Mike Kingery, KE4AZN for the above information]
[11202005]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz (67.0 Hz PL tone) (See below for operating
procedures)
Downlink: 436.795 MHz

There have been unconfirmed reports on the amsat-bb remailer that SO-50 has
shifted downlink frequency as much as 5khz up. This both from Europe.

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The
order of operation is thus: (allow for Doppler as necessary)

1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer
on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater
on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10
minute timer.
[09122004]
=====
FO-29 JAS-2
Catalog number: 24278

Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplink: 145.850 145.870 145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

John, N4QWL reports on July 16th, 2005:
Last evening I had a AOS to LOS qso with WI2W. FO-29 came up at 01:17z here in FM07 and I found WI2W and we chatted until 01:33z. The satellite was at 2 degrees elevation when I finally heard him start to crackle a bit. What a great QSO! To think that I watched this bird launch back in 1996 and it is still working so well is a real thrill. I believe I still have the video. I might just look for it and watch it again. Boy do I love this satellite stuff! Look for you all up there.

Please send the reception reports to lab2 'at' jarl.or.jp.
Please use the subject line: 'FO-29 reception report'.

Mineo, JE9PEL, has an FO-29 satellite telemetry analysis program that will automatically analyze all digital telemetry from the satellite (such as current, voltage and temperature). FO29CWTE is available at:
http://www.ne.jp/asahi/hamradio/je9pel/
[ANS-WSR wishes to thanks John, N4QWL for this week's report]
[11132005]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

The latest information on AO-27 from control operator Michael Wyrick, N3UC (former N4USI), can be found at:
http://www.ao27.org

An AO-27 question-and-answer page is available on the AMSAT-NA web site, with updates by Ray, W2RS. The URL is:
http://www.amsat.org/amsat/intro/ao27faq.html

[ANS-WSR thanks John, K6YK, for this week's AO-27 report]
[11132005]
=====

AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Semi-operational in sunlight.
Return to active status: June 21,2002

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A
145.975 to 145.925 MHz CW/USB Mode B
Beacon: 29.502 MHz, 145.972 MHz, 435.1 MHz, 2304.1 MHz

Emily, W0EEC has created a website to allow the users of AO-7 to record
contacts, observations and use of the satellite more effectively at:
http://www.emilyshouse.com/experthams/ao7/main.php
This includes the ability to log contacts.

Tim, K3TZ has written a program to decode AO-07 telemetry. The program can
be downloaded at:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

For more AO-7 info:
http://www.amsat.org/amsat/sats/n7hpr/ao7.html
[11132005]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: DIGIPEATER
Digipeater: ACTIVE

The current Expedition 12 crew is:
Commander: William McArthur - KC5ACR
Flight Engineer: Valery Tokarev - (no call)

Worldwide packet uplink: 145.990 MHz FM
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM
Doppler Shift is 10 KHz

Russian callsigns: RS0ISS, RZ3DZR
USA callsign: NA1SS
Packet station mailbox callsign: RS0ISS-11
Packet station keyboard callsign: RS0ISS-3
Digipeater callsign: ARISS

The ISS Fan Club Webpage < http://www.issfanclub.com > reports that the
Digipeater is active as of Nov 14th, 2005 at 0207UTC.

The ISS daily crew schedule can be found at:
http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is
NOT translated from Russian and posted.

More information is available at:
http://www.rac.ca/ariss
http://spaceflight.nasa.gov/station/reference/radio/
http://www.marexmg.org/fileshtml/unprotopage.html
http://www.issfanclub.com
http://oscar.dcarr.org/
[11132005]
NNNN
/EX

SB SAT @ AMSAT <KB9MMC $ANS-345.S2
WSR 345 Part 2 12/11/2005

AMSAT NEWS SERVICE BULLETIN 345.S2 FROM AMSAT HQ
SILVER SPRING, MD, December 11, 2005
TO ALL RADIO AMATEURS
BID: $ANS-345.S2

PCSAT2 ?0-??
Catalog Number: 25544
Launch Date: August 1, 2005

Status: Battery-saving mode
Current Mode: None

Digital Downlink: 435.275 Mhz
Digital Uplink: 145.825 Mhz
PSK-31 Downlink: 435.275 Mhz
PSK-31 Uplink: 29.400 - 29.403 Mhz

Broadcast:
BBS:

PCSAT2 was installed on the exterior of the International Space Station and
was activated on August 3, 2005.

Packets seen from PCSAT2 can be reviewed at:
http://www.findu.com/cgi-bin/pcsat2.cgi

A screen shot of both the 9600 bps and 1200 bps decoded data as seen by
Simon, 9W2QC, can be seen at:
http://www.9w2qc.net/pcsat2/

More information on PCSAT2 can be found at:
http://web.usna.navy.mil/~bruninga/pcsat2.html
[11272005}
=====

AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - V/U 9k6
VOICE REPEATER - V/U FM

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
Analog voice uplink: 145.880 MHZ FM
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

This from the AO-51 Command team:

12 Dec
FM Repeater, V/S
Uplink: 145.920 mhz FM, No PL Tone
Downlink 2401.200 mhz FM

19 Dec
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital
[ANS-WSR thanks Mike Kingery, KE4AZN for the above information]
[11202005]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Operational

General Usage Uplink/Downlink:145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSat is a 1200-baud APRS digipeater designed for use by stations using
hand-held or mobile transceivers. Downlinks feed a central web site at:
http://pcsat.aprs.org

The APRS-equipped PCSat was built by midshipmen from the U.S. Naval Academy
under the guidance of Bob Bruninga, WB4APR.

[11272005]
=====
CUTE-1
Catalog number: 27844
Launched: June 30,2003

Status: Operational

Uplink: ?
Downlink: 436.8375 CW
437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)
Cliff, K7RR reports:
In the latest Weekly Satellite Report, CUTE 1, #27844 is listed as
OPERATIONAL?
Indeed it is very operational as a CUBESAT sending CW telemetry on
436.8345 MHz. At the July 7 2005, 23:45:20 pass over the Western USA:
CUTE 1 6B A4 xx 7F D7 66A8 4702 FF FF7C 65
CUTE 1 6C A6 59 80 D9 66A8 4702 FF FE7C B6

The June 30th KEPS were within ten seconds of AOS and LOS. It is an very
good object to practice tracking as the orbit and transmitter power are
similar to proposed CUBESATS awaiting launch this December. As a check
for Doppler correction, the lack of change in tone is an excellent
indicator.

CUTE 1 is a Japanese (Tokyo Institute of Technology) one kilogram
nanosatellite that was launched by a Rokot rocket from Plesetsk at
14:15 UT on 30 June 2003. It carries a 100 mW beacon at 436.8375 MHz.
Initial orbital parameters were period 101.4 min, apogee 831 km, perigee
819 km, and inclination 98.7?.

For further info about CUTE-1 goto:
http://lss.mes.titech.ac.jp/ssp/cubesat/operation/Schedule_e.html

[ANS WSR wishes to thank Cliff, K7RR, for this week's information]
[07242005]
=====
GO-32 TECHSAT-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
(435.325 n/a - temperature problems)
Uplinks: 145.850, 145.890, 145.930 FM
1269.700, 1269.800, 1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

Jeff, KB2M, reports November 15th, 2005:
I might be wrong about this, but as I am the only one I see working GO-32
here goes. If you do a DIR request up on the 145.890 uplink the bird turns

on. Give it a try....

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[ANS-WSR wishes to thank Jeff, KB2M for this weeks report.]
[11202005]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for
APRS users.

Uplink: 145.90 145.92 145.94 145.96 MHz FM
(using 1200-baud Manchester FSK)
Downlink: 437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon: 2401.1428 MHz
Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

A WOD collection of current graphics along with general information
and telemetry samples can be found at:
http://www.telecable.es/personales/ea1bcu
[05092004]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational?

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK).
approx. 10 days ON, 10 days OFF
Mode-S Beacon: 2401.500 MHz. ... OFF
UHFBeacon: 435.025 MHz. ... OFF

During the period 24 September to 25 October 2005 the VHF beacon on
145.826MHz resumed transmissions, as expected, on 30 September, sometime
between 06:05 and 06:42 UTC passes. Reasonable signals were also
captured on the 17:44 pass, later that day. However by the 16:49 UTC
pass on 02 October, the beacon had switched OFF. Transmissions resumed
on 21 October, and should continue until around 31 October.

The on-board clock continues to show a very large error. Currently it is
19.2394 days slow, having lost six hours while the beacon was last OFF,
ie. between 02 October and 21 October. When the beacon is ON, the clock
is stable to within a few seconds.

All the analogue telemetry channels, 0 to 59 are zero, ie they have
failed. The status channels 60 to 67 are still working.

The eclipses have now ended, and the satellite should be in continuous sunlight for the remainder of this year, and well into next year. This should help the satellite to continue transmitting, although continuous sunlight can cause problems due to excessive temperatures.

The watchdog timer appears to be operating on the 20 day cycle, ie. approximately ten days ON followed by 10 days OFF. It appears to be uneffected by problems of the on-board clock. However, poor solar attitude, and battery problems, may be combining to produce a low line voltage. This causes the beacon to switch OFF premeaturely, and resets the watchdog timer cycle.

The Beacon frequencies are -
VHF 145.826 MHz. AFSK FM ASCII Telemetry
UHF 435.025 MHz. OFF
S-band 2401.5 MHz. OFF

Listeners to OSCAR-11 may be interested in visiting my website which contains
an archive of news & telemetry data. It also contains details about using a soundcard or hardware demodulators for data capture. There is software for capturing data, and decoding ASCII telemetry. The URL is:

www.users.zetnet.co.uk/clivew/

If you place this bulletin on a terrestrial packet network, please use the bulletin identifier $BID:U2RPT114.CWV, to prevent duplication.

More information on UO-11 OSCAR-11 can be found at:
http://www.users.zetnet.co.uk/clivew/

MPEG3 files can be found here at Mineo, JE9PEL website:
http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[ANS-WSR thanks Clive G3CWV for the above information]
[10302005]
NNNN
/EX

SB SAT @ AMSAT <KB9MMC $ANS-345.S3
WSR 345 Part 3 12/11/2005

AMSAT NEWS SERVICE BULLETIN 345.S3 FROM AMSAT HQ
SILVER SPRING, MD, December 11, 2005
TO ALL RADIO AMATEURS
BID: $ANS-345.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

SSETI ?O-??
Catalog Number: 28894
Launch Date: October 27, 2005

Status: In orbit - being commissioned

A daily report of the launch campaign is being maintained at
http://sseti.gte.tuwien.ac.at/express/mop/index.php?uri=news.html
This mission operations site is completely up-to-date regarding Kepler TLEs
and other LEOP "Launch and Early Operations Phase" details.

The SERACC software, needed to decode and submit the received data to the
SSETI database, together with some audio files containing recorded 9k6
signal to experiment with is also now available

The ESA website about SSETI Express is at:
http://www.esa.int/SPECIALS/sseti_express/SEMARJ7X9DE_0.html

The latest version of the SSETI Express handbook can be downloaded free
of charge from the AMSAT-UK website at:
http://www.uk.amsat.org/

More SSETI Links at:

SpaceDaily has a report about SSETI at:
http://www.spacedaily.com/news/internet-04zzzu.html

You can find more info about SSETI at:
http://sseti.gte.tuwien.ac.at/WSW4/

Latest news about SSETI can be found at:
http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php

Look at the website for the SSETI Express webcam
http://sseti.gte.tuwien.ac.at/WSW4/webcam.htm
[ANS-WSR thanks Graham, UA/G3VZV and Trevor, M5AKA for the above]
[11202005]
======
POSAT-1 PO-28
Catalog Number: 22829
Launched : September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 435.250 MHz
435.275 MHz

Uplink: 145.925 MHz
145.975 MHz

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

PO-28 (POSAT-1), Portugal's first satellite, launched 12 years ago,will
be turned over to Amateur Radio use in the very near future. That was the
word July 30 from AMSAT-UK Secretary Jim Heck, G3WGM, during the AMSAT-UK
International Space Colloquium in Guildford, England.

Launched September 25, 1993, the satellite operated as a packet
store-and-forward BBS (9600 baud FM FSK) on Amateur Radio frequencies for
several weeks in early 1994. Over the years, PO-28's primary usage has been
commercial, although plans have called for eventually shifting its operation

to ham radio use. G3WGM reports that following lengthy negotiations it has been agreed thatthe satellite can be switched permanently to amateur frequencies. The change over is expected to take a couple of weeks.

The Portuguese satellite was built at the University of Surrey as part of a collaborative satellite technology program that involved industry and academe. Uplink frequencies will be 145.925 and 145.975 MHz. Downlink frequencies will be 435.250 and 435.275 MHz. More information on PO-28 is on the AMSAT Web site

http://www.amsat.org/amsat/sats/n7hpr/po28.html.

Uplink Frequencies: 145.925 and 145.975 MHz
Downlink Frequencies: 435.250 and 435.275 MHz

Orbit: 822 x 800 km, 98.6 deg inclined, sun-synchronous.

Transponder capabilities include FM repeater and 38k4 data. If you want to hear how loud this satellite is, listen on 429.950 until the change back to amateur radio service.

Keplerian elements for PO-28 are currently contained in the AMSAT keps bulletins and at Celestrak in amateur.txt using the name "POSAT". Users of Space Track should query the NORAD Satellite ID number 22829. The name listed by Space Track is "EYESAT A".

More information of POSAT-1 can be found at:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
http://www.amsat.org/amsat/sats/n7hpr/po28.html
[ANS-WSR wishes to thank Duane Naugle, KO6BT, for this week's update.]
[11062005]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon: 145.810 MHz (unmodulated carrier)

AO-10 has been locked into a Mode-B, 70-cm uplink and
2-meter downlink for several years.

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Non-operational

Uplink: 145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink: 435.812 MHz SSB
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Alberto E. Zagni - I2KBD reports on 02/13/05
The spacecraft is in MBL (safe mode) and is trasmitting just 6 channels
of telemetry. Temperatures and voltage are nominal, but there seems to
be a problem with the onboard receiver, refusing to accept commands.
The spacecraft was launched in 1993, thus nearing 12 years in orbit...

Best regards
Alberto E. Zagni - I2KBD
ITAMSAT Mission Director

More information of IO-26 can be found at:

http://joshua.micronet.it/english/itamsat/itamsathome.html
http://www.amsat.org/amsat/sats/n7hpr/io26.html
www.itamsat.org

[02132005]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon: 29.408 MHz
Robot: 29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB
Beacon: 145.860 MHz
Robot: 145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM

[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB
Beacon: 29.352 MHz (intermittent)
SSB meeting frequency: 29.380 MHz (unofficial)

John, KD6PAG reports on June 16, 2004 to WSR:
RS-15 beacon seemed to be back in the mode where it's a tone about 5
seconds off and then 5 seconds on this morning.

WSR is looking for more confirmations of RS-15 coming back.

[ANS-WSR thanks John, KD6PAG for RS-15 information]
[06202004]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplink: 145.84 145.86 145.88 145.90 MHz FM
(using 1200-baud Manchester FSK)
CW downlink: 437.125 MHz
Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)
Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]
=====
FO-20 JAS-1b
Catalog number: 20480

Launch Date: February 07, 1990

Status: Non-Operational

Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM
Broadcast Callsign: HLO1-11
BBS: HLO1-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a
non-operational status.
[05092004]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM (9600-baud FSK)
Downlink: 436.500 MHz FM
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink frequency (listed on the PanSat web site) 436.500 MHz

The satellite is not available for general uplink transmissions.

The Naval Postgraduate School developed PanSat. At the time of
launch, PanSat spread-spectrum digital transponders were to
be available to Amateur Radio operators along with software to utilize
this technology.

The satellite is still operating, however, the spread spectrum packet
radio portion never took place. The spacecraft is now beyond it's
initial 2-year mission life, but telemetry records are still being
downloaded.

For more information, visit the official PanSat web site at:
http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS-WSR has no further information]
[05232004]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlink: 437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA
web site at the following URL:

ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplink V-band 145.840 - 145.990 MHz CW/LSB
U-band 435.550 - 435.800 MHz CW/LSB
L1-band 1269.250 - 1269.500 MHz CW/LSB
L2-band 1268.325 - 1268.575 MHz CW/LSB
S1-band 2400.350 - 2400.600 MHz CW/LSB
Downlink: S2-band 2401.225 - 2401.475 MHz CW/USB
K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon: 2401.323, 24,048.035
[05232004]

SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational
Downlink: 437.075 MHz
Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz
Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
callsign KE6QMD, as per the user service agreement located at the
following
URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink: 145.850 or 145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz
Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[11202005]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Semi-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

AO-49 (SAFIR-M) is a German amateur radio payload onboard the small German
scientific satellite "RUBIN-2".

AO-49 was built by the German amateur radio association "AATiS e.V." (German
acronym for "Arbeitskreis Amateurfunk und Telekommunikation in der Schule",
which means: 'working group for amateur radio and telecommunications in
schools'). AO-49 is designed as a "store and broadcast" system for APRS
based
messages, dedicated for the use of schools in combination with the existing
WX-Net and planned buoy experiments in Germany.

No transmissions detected since the 1st of February 2003! It appears AO-49
is not properly aligned to illuminate the solar panels. This should end
soon.
Due to its orbit, AO-49 will be in a phase without eclipses until 13Feb03.

Martin DG8UAU has written a small software program "SAFIR-M Decoder" to
allow decoding of the received DATA0 frames. It is available at:
http://amend.gmxhome.de in the section Aktuelles.

Details on AO-49 (SAFIR-M) can be found at:
http://amend.gmxhome.de

Information about AATiS e.V. is available at:
http://www.aatis.de
[11132005]
NNNN
/EX

SB SAT @ AMSAT <KB9MMC $ANS-345.S4
WSR 345 Part 4 12/11/2005

AMSAT NEWS SERVICE BULLETIN 345.S4 FROM AMSAT HQ
SILVER SPRING, MD, December 11,2005
TO ALL RADIO AMATEURS
BID: $ANS-345.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE
PROPOSED FOR LAUNCH AT THIS TIME:

UCISAT ?O-??
Catalog number:
Proposed Launch Date: October 31, 2005

Status: Under Construction

Downlink: Submission in Progress
Uplink: Submission in Progress
Callsign: Submission in Progress
[11272005]
=====
PHASE 3E ?O-??
Catalog Number:
Proposed Launch Date: Early 2006

Status: Under Construction

For the latest project status update please visit the AMSAT-DL
P3-E web page:
http://www.amsat-dl.org/p3e/

[ANS-WSR wishes to thank William Leijenaar, PE1RAH for this week's report]
[10022005]
=====
CP1 ?o-??
Catalog Number:

Proposed Launch Date: Mid May 2005

Proposed Callsign: N6CP
Proposed Transmit Frequency: 436.845
[03272005]
=====
CP2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.325
[03272005]
=====
HAUSAT1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: D90HP
Proposed Transmit Frequency: 437.465
[03272005]
=====
ICE Cube 1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: W2CXM
Proposed Transmit Frequency: 437.305
[03272005]
=====
ICE Cube 2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N2VR
Proposed Transmit Frequency: 437.425
[03272005]
=====
ION ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.505
[03272005]
=====
KUTEsat ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: KC0RMW
Proposed Transmit Frequency: 437.385

[03272005]
=====
MEROPE ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: K7MSU-1
Proposed Transmit Frequency: 145.980
[03272005]
=====
nCUBE1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
2407.25
[03272005]
=====
RINCON ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
437.345
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SEEDS ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: JQ1YGU
Proposed Transmit Frequency: 437.485
[03272005]
=====

Mea Huaka ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.405
[03272005]
=====
SUITSAT ?O-??
Catalog Number:
Proposed Release Date: December 8th, 2005

Proposed Callsign: RS0RS ?
Proposed Transmit Frequency: 145.990

This from Frank, KA3HDO:
I have recieved information that the Russian EVA that will deply SuitSat, planned for December 8th, has been delayed to late January/Early February 2006. As we get more information, we will post it.

[ANS-WSR wishes to thank Frank Bauer, KA3HDO for this weeks report]
[11272005]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James K. Darrow, KB9MMC.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

430. WSR-352 AMSAT Weekly Satellite Report

Newsgroup: rec.radio.amateur.space
Date: 2005-12-21 04:17:36 UTC
From: JoAnne Maenpaa <wb9jej_no-spam@earthlink.net>
Message-ID: <AH4qf.8603$Dd2.4951@newsread3.news.atl.earthlink.net>
Source record: 1894

This report is organized into 4 parts.
Part 1 - operational analog amateur satellites.
Part 2 - operational digital amateur satellites.
Part 3 - non - operational satellites
Part 4 - proposed satellites

SB SAT @ AMSAT <KB9MMC $ANS-352.S1
WSR 352 Part 1 12/18/2005

AMSAT NEWS SERVICE BULLETIN 352.S1 FROM AMSAT HQ
SILVER SPRING, MD, December 18, 2005
TO ALL RADIO AMATEURS
BID: $ANS-352.S1

VO-52 HAMSAT
Catalog Number: 28650
Launch Date: May 05,2005

Status: Testing
Current Mode: U/V - Dutch Transponder

Proposed frequencies:

Indian Transponder:
Uplink : 435.220 MHz to 435.280 MHz LSB/CW
Downlink: 145.870 MHz to 145.930 MHz USB/CW
Beacom : 145.859330 MHZ CW

Dutch Transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacon : 145.860MHz 12WPM with CW message

This from William Leijenaar, PE1RAH:
Dear AMSATs,

I wish I had the same free time now as when I designed the HAMSAT and P3e transponder. Unfortunatly these times have been changed (for the moment) due to QRL things.

However, I often try to be QRV on the HAMSAT and check the signals from my transponder and read the messages on amsat-bb. I just read about the beacon "problem". The "problem" with the beacon is actually not a problem but it is known. The beacon signal is injected at the IF, and runs throught the transponder from the IF section, up converter, via the final PA to the antenna.

The changes you hear on the beacon frequency is caused by the amplitude limiters in the IF that are activated by a too strong uplink signal. These limiters are only for protection, to avoid that the IF and VHF amplifiers get overloaded and generate all kinds of unwanted signals at the output.

My transponder is straight forward to keep it physical small and cheap in cost (as I had no sponsors). Unlike most other transponders my transponder on HAM-SAT has no AGC system. It gives always maximum gain with maximum sensitivity.

The main reason is that the AGC systems I had didn't fit in the small sized box. As an option I choose for limiters, and it worked great in tests.

Secondly, I tought limiters might be helpfull against aligators. To deal with too strong signals most transponder have an AGC to lower the RX gain, and actually be helpfull to the alligators. With the limiters their SSB signal will get distorted and they might lower their powers to have better audio quality.

The change in beacon sound is an indication for too much uplink powers and will be heared mainly in areas where higher powers are available on the up-link, like US, Europe, Japan...

Its funny to know that nobody here has discovered that the bandpass is shifted some down in frequency... There is no technical failure, the reason is known here... No panic please :o)

Please keep in mind that this transponder is my privat work and privat money. Frankly speaking this is my privat transponder I "give" to the amateur world. I was one of those many poor students, and this was the best I could do with my resources I had available at that time... The whole thing is just 16cm x 10cm x 3cm !! even smaller than the professional Indian transponder :o)

I hope you all enjoy my transponder even when it is not perfect.
[11272005]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - V/U 9k6
VOICE REPEATER - V/U FM

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
Analog voice uplink: 145.880 MHZ FM
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast

Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

This from the AO-51 Command team:

19 Dec
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital
Downlink: 435.150 mhz FM, 9k6 PBP Digital

January 2006 Amsat Kid's Day on AO-51

Amsat-NA, the AO-51 Command Team, and the AO-51 Operations Team
will sponsor Kid's Day on AO-51 on January 8, 2006. The event
will run from approximately 0100 UTC 8 January until 0345 UTC
9 January. The event is open to all kids, worldwide. We ask
all amateur radio stations to give this short time window to
promote satellite operations with kids, by actually showing a
kid how to make contacts via AO-51, providing a station to contact,
or stepping aside to allow others to make contacts with the kids.
During the event, please limit contacts to stations that are
operating with kids at the microphone. This should allow the
kids to have a nice QSO and pass some information. Kids can tell
their name, age, who is helping them operate on AO-51, where they
live, and other information about themselves.

AO-51 will be configured in the following mode during the event.
Please note the change in the uplink frequency for the event.
The PL tone will be turned off for the event.

Uplink: 145.880 mhz FM voice
Downlink: 435.300 mhz FM voice

The digital transponder on 435.150 will be turned off during
the event.

See http://www.arrl.org/FandES/ead/kd-rules.html on the ARRL
website for more Kids Day information.

Have fun and enjoy AO-51!

73 KE4AZN
Amsat VP-Operations
Echo Command Station

[ANS-WSR thanks Mike Kingery, KE4AZN for the above information]
[12182005]
=====
SO-50 SAUDISAT-1C

Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz (67.0 Hz PL tone) (See below for operating procedures)
Downlink: 436.795 MHz

There have been unconfirmed reports on the amsat-bb remailer that SO-50 has shifted downlink frequency as much as 5khz up. This both from Europe.

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The order of operation is thus: (allow for Doppler as necessary)

1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10 minute timer.
[09122004]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplink: 145.850 145.870 145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

John, N4QWL reports on July 16th, 2005:
Last evening I had a AOS to LOS qso with WI2W. FO-29 came up at 01:17z here in FM07 and I found WI2W and we chatted until 01:33z. The satellite was at 2 degrees elevation when I finally heard him start to crackle a bit. What a great QSO! To think that I watched this bird launch back in 1996 and it is still working so well is a real thrill. I believe I still have the video. I might just look for it and watch it again. Boy do I love this satellite stuff! Look for you all up there.

Please send the reception reports to lab2 'at' jarl.or.jp.
Please use the subject line: 'FO-29 reception report'.

Mineo, JE9PEL, has an FO-29 satellite telemetry analysis program that will automatically analyze all digital telemetry from the satellite (such as

current, voltage and temperature). FO29CWTE is available at:
http://www.ne.jp/asahi/hamradio/je9pel/
[ANS-WSR wishes to thanks John, N4QWL for this week's report]
[11132005]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

The latest information on AO-27 from control operator Michael Wyrick, N3UC
(former N4USI), can be found at:
http://www.ao27.org

An AO-27 question-and-answer page is available on the AMSAT-NA web site,
with updates by Ray, W2RS. The URL is:
http://www.amsat.org/amsat/intro/ao27faq.html

[ANS-WSR thanks John, K6YK, for this week's AO-27 report]
[11132005]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Semi-operational in sunlight.
Return to active status: June 21,2002

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A
145.975 to 145.925 MHz CW/USB Mode B
Beacon: 29.502 MHz, 145.972 MHz, 435.1 MHz, 2304.1 MHz

Emily, W0EEC has created a website to allow the users of AO-7 to record
contacts, observations and use of the satellite more effectively at:
http://www.emilyshouse.com/experthams/ao7/main.php
This includes the ability to log contacts.

Tim, K3TZ has written a program to decode AO-07 telemetry. The program can
be downloaded at:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

For more AO-7 info:
http://www.amsat.org/amsat/sats/n7hpr/ao7.html
[11132005]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544

Launch date: November 20, 1998

Status: Operational
Current Mode: DIGIPEATER
Digipeater: ACTIVE

The current Expedition 12 crew is:
Commander: William McArthur - KC5ACR
Flight Engineer: Valery Tokarev - (no call)

Worldwide packet uplink: 145.990 MHz FM
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM
Doppler Shift is 10 KHz

Russian callsigns: RS0ISS, RZ3DZR
USA callsign: NA1SS
Packet station mailbox callsign: RS0ISS-11
Packet station keyboard callsign: RS0ISS-3
Digipeater callsign: ARISS

The ARRL Reports;

ISS commander shooting for WAC, WAS and maybe DXCC from
space

ISS Expedition 12 Commander Bill McArthur, KC5ACR, has proven to be one of the more active Amateur Radio on the International Space Station (ARISS) operators among ham radio operators who have occupied the space station. In fact, McArthur's having so much fun operating from space that he's hoping to complete Worked All Continents (WAC), Worked All States (WAS) and maybe even DXCC from space.

"Bill McArthur continues to be active on voice and now has a couple of personal goals he is trying to achieve," says ARISS Ham Radio Project Engineer Kenneth Ransom, N5VHO. "He is trying to talk to someone in every state in the United States. According to his log, he has managed to work 37 states so far." In addition, Ransom says, McArthur wants to work as many countries as he can.

"He's off to a good start with 28 DXCC entities in his log as of December 12," he said. "These contacts have been with amateur stations on every continent with the exception of Antarctica." That contact could happen this weekend, however. Although the IARU does not require WAC applicants to have worked Antarctica, Ransom says that ARISS tradition calls for an Antarctica QSO to achieve WAC from space "since the astronauts seem to have an unfair advantage."

Expedition 9 astronaut Mike Fincke, KE5AIT, became the first ISS crew member to contact all seven of the world's continents via Amateur Radio from NA1SS.

States on McArthur's most-needed list are Alaska, Hawaii, Idaho, Missouri, New Hampshire, New Mexico, North Dakota, Pennsylvania, Rhode Island, South Dakota, Vermont, Virginia and Washington.

"The list of DXCC entities is just starting to grow, so he needs a lot right now," Ransom conceded this week, adding that he hasn't included ARISS school group contacts in his counts and hopes McArthur will achieve his goals without them. "We won't know the official results for months after the mission," he added.

McArthur is about halfway through his approximately six-month duty tour aboard the ISS. He and crewmate Valery Tokarev will return to Earth in April.

During Thanksgiving week, McArthur reportedly made some three dozen casual contacts, most of them over North America and a few over Europe and New Zealand. He made contacts with stations in the US on December 6. He also had QSOs with Australia, New Zealand and the US on December 11.

[WSR Thanks the ARRL for the above information]

The ISS Fan Club Webpage < http://www.issfanclub.com > reports that the Digipeater is active as of Nov 14th, 2005 at 0207UTC.

The ISS daily crew schedule can be found at:
http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.

More information is available at:
http://www.rac.ca/ariss
http://spaceflight.nasa.gov/station/reference/radio/
http://www.marexmg.org/fileshtml/unprotopage.html
http://www.issfanclub.com
http://oscar.dcarr.org/
[11132005]
NNNN
/EX

SB SAT @ AMSAT <KB9MMC $ANS-352.S2
WSR 352 Part 2 12/18/2005

AMSAT NEWS SERVICE BULLETIN 352.S2 FROM AMSAT HQ
SILVER SPRING, MD, December 12, 2005
TO ALL RADIO AMATEURS
BID: $ANS-352.S2

PCSAT2 ?0-??
Catalog Number: 25544
Launch Date: August 1, 2005

Status: Battery-saving mode
Current Mode: None

Digital Downlink: 435.275 Mhz
Digital Uplink: 145.825 Mhz
PSK-31 Downlink: 435.275 Mhz
PSK-31 Uplink: 29.400 - 29.403 Mhz

Broadcast:
BBS:

PCSAT2 was installed on the exterior of the International Space Station and
was activated on August 3, 2005.

Packets seen from PCSAT2 can be reviewed at:
http://www.findu.com/cgi-bin/pcsat2.cgi

A screen shot of both the 9600 bps and 1200 bps decoded data as seen by
Simon, 9W2QC, can be seen at:
http://www.9w2qc.net/pcsat2/

More information on PCSAT2 can be found at:
http://web.usna.navy.mil/~bruninga/pcsat2.html
[11272005}
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - V/U 9k6
VOICE REPEATER - V/U FM

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
Analog voice uplink: 145.880 MHZ FM
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

This from the AO-51 Command team:

19 Dec
FM Repeater, V/U
Uplink: 145.920 mhz FM, 67 hz PL Tone
Downlink 435.300 mhz FM
9k6 Digital, V/U, PBP BBS (Pacsat Broadcast Protocol BBS)
Uplink: 145.860 mhz FM, 9k6 PBP Digital

Downlink: 435.150 mhz FM, 9k6 PBP Digital

January 2006 Amsat Kid's Day on AO-51

Amsat-NA, the AO-51 Command Team, and the AO-51 Operations Team
will sponsor Kid's Day on AO-51 on January 8, 2006. The event
will run from approximately 0100 UTC 8 January until 0345 UTC
9 January. The event is open to all kids, worldwide. We ask
all amateur radio stations to give this short time window to
promote satellite operations with kids, by actually showing a
kid how to make contacts via AO-51, providing a station to contact,
or stepping aside to allow others to make contacts with the kids.
During the event, please limit contacts to stations that are
operating with kids at the microphone. This should allow the
kids to have a nice QSO and pass some information. Kids can tell
their name, age, who is helping them operate on AO-51, where they
live, and other information about themselves.

AO-51 will be configured in the following mode during the event.
Please note the change in the uplink frequency for the event.
The PL tone will be turned off for the event.

Uplink: 145.880 mhz FM voice
Downlink: 435.300 mhz FM voice

The digital transponder on 435.150 will be turned off during
the event.

See http://www.arrl.org/FandES/ead/kd-rules.html on the ARRL
website for more Kids Day information.

Have fun and enjoy AO-51!

73 KE4AZN
Amsat VP-Operations
Echo Command Station

[ANS-WSR thanks Mike Kingery, KE4AZN for the above information]
[11202005]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Operational

General Usage Uplink/Downlink:145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

Bob WB4APR reports:

The PCSAT-1 digipeater on 145.825 was still going strong and
working well up until December 15.

The activity page http://pcsat.aprs.org shows about 75
stations accessed PSCAT-1 between December 13 and 14. This
won't last much longer since PCSAT-1 is now back to 30 minute
eclipses headed towards worst-case of 35 minutes during the
week of December 18-25.

Sometime before 2202z on the 15th PCSAT-1 suffered a reset to
W3ADO-1 and lost its low power settings. Now at 1740z on the
17th, the US Naval Academy Satellite Lab sent the restore
commands, but with 33 minute eclipses, it is doubtfull they
will hold. We may have lost her until March, 2006.

The command station at the US Naval Academy should be able to
keep PCSAT-1 alive indefinately as long as stations do not user
her in the dark and the command stations never let her 68 hour
command watch-dog timer time out.

Anyone can work PCSAT-1 with ANY typical 1200 baud packet
station on 145.825. Just set your path to UNPROTO APRS via
ARISS (the same that you use via ARISS on the ISS or via PCSAT2).
Mobiles with the D700 or the TH-D7 HT APRS radios will see packets
directly on their front panel and can work it from their mobile.

[ANS-WSR thanks Bob Bruninga, WB4APR and the US Naval Academy
Satellite Lab for the above information]

PCSat is a 1200-baud APRS digipeater designed for use by stations using
hand-held or mobile transceivers. Downlinks feed a central web site at:
http://pcsat.aprs.org

The APRS-equipped PCSat was built by midshipmen from the U.S. Naval Academy
under the guidance of Bob Bruninga, WB4APR.
[12182005]
=====
CUTE-1
Catalog number: 27844
Launched: June 30,2003

Status: Operational

Uplink: ?
Downlink: 436.8375 CW
437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)
Cliff, K7RR reports:
In the latest Weekly Satellite Report, CUTE 1, #27844 is listed as
OPERATIONAL?
Indeed it is very operational as a CUBESAT sending CW telemetry on
436.8345 MHz. At the July 7 2005, 23:45:20 pass over the Western USA:
CUTE 1 6B A4 xx 7F D7 66A8 4702 FF FF7C 65
CUTE 1 6C A6 59 80 D9 66A8 4702 FF FE7C B6

The June 30th KEPS were within ten seconds of AOS and LOS. It is an very
good object to practice tracking as the orbit and transmitter power are
similar to proposed CUBESATS awaiting launch this December. As a check

for Doppler correction, the lack of change in tone is an excellent
indicator.

CUTE 1 is a Japanese (Tokyo Institute of Technology) one kilogram
nanosatellite that was launched by a Rokot rocket from Plesetsk at
14:15 UT on 30 June 2003. It carries a 100 mW beacon at 436.8375 MHz.
Initial orbital parameters were period 101.4 min, apogee 831 km, perigee
819 km, and inclination 98.7?.

For further info about CUTE-1 goto:
http://lss.mes.titech.ac.jp/ssp/cubesat/operation/Schedule_e.html

[ANS WSR wishes to thank Cliff, K7RR, for this week's information]
[07242005]
=====
GO-32 TECHSAT-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
(435.325 n/a - temperature problems)
Uplinks: 145.850, 145.890, 145.930 FM
1269.700, 1269.800, 1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

Jeff, KB2M, reports November 15th, 2005:
I might be wrong about this, but as I am the only one I see working GO-32
here goes. If you do a DIR request up on the 145.890 uplink the bird turns
on. Give it a try....

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[ANS-WSR wishes to thank Jeff, KB2M for this weeks report.]
[11202005]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for
APRS users.

Uplink: 145.90 145.92 145.94 145.96 MHz FM
(using 1200-baud Manchester FSK)
Downlink: 437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon: 2401.1428 MHz
Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

A WOD collection of current graphics along with general information
and telemetry samples can be found at:
http://www.telecable.es/personales/ea1bcu
[05092004]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational?

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK).
approx. 10 days ON, 10 days OFF
Mode-S Beacon: 2401.500 MHz. ... OFF
UHFBeacon: 435.025 MHz. ... OFF

During the period 21 November to 14 December 2005 the VHF beacon
on 145.826 MHz has been heard from 05 to 10 December.

Signals have been very variable during this period. Sometimes
received at good strength, at other times they were inaudible,
even with the BFO switched ON (ie. in CW mode).

If the watchdog resets as expected, then the beacon should restart
around 31 December. However, more observations are needed to con-
firm the timing of the watchdog timer, and whether it is being reset
prematurely. Therefore, it may be worth listening for the satellite
a few days before 31 December.

The on-board clock continues to show a very large error. On 09 Dec-
ember it was 21.8 days slow.

All the analogue telemetry channels, 0 to 59 are zero, ie they
have failed. The status channels 60 to 67 are still working.

The eclipses have now ended, and the satellite should be in
continuous sunlight for the remainder of this year, and next year
until early May. This should help the satellite to continue trans-
mitting, although continuous sunlight can cause problems due to
excessive temperatures. Power supply problems can be caused by poor
earth pointing attitude, ie the sunlight illuminating the ends of
the satellite, instead of the solar arrays.

The watchdog timer appears to be operating on the 20 day cycle,
ie. approximately ten days ON followed by 10 days OFF. It appears
to be unaffected by problems of the on-board clock. However, poor
solar attitude, and battery problems, may be combining to produce
a low 14 volt line supply. This appears to be causing the beacon
to switch OFF prematurely, and resets the watchdog timer cycle.
It seems very likely that the battery is now unable to retain its
charge, due to having endured around 100,000 partial charge/discharge
cycles, always a problem with NiCad cells. When analogue telemetry
was transmitted, it showed an unexplained current drain from the 14
volt line. This just adds to the present problems.

The Beacon frequencies are -
VHF 145.826 MHz. AFSK FM ASCII Telemetry
UHF 435.025 MHz. OFF
S-band 2401.5 MHz. OFF

Listeners to OSCAR-11 may be interested in visiting my website
which contains an archive of news & telemetry data. It also con-
tains details about using a soundcard or hardware demodulators for
data capture. There is software for capturing data, and decoding
ASCII telemetry. The URL is www.users.zetnet.co.uk/clivew/

More information on UO-11 OSCAR-11 can be found at:
http://www.users.zetnet.co.uk/clivew/

MPEG3 files can be found here at Mineo, JE9PEL website:
http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[ANS-WSR thanks Clive G3CWV for the above information]
[12182005]
NNNN
/EX

SB SAT @ AMSAT <KB9MMC $ANS-352.S3
WSR 352 Part 3 12/18/2005

AMSAT NEWS SERVICE BULLETIN 352.S3 FROM AMSAT HQ
SILVER SPRING, MD, December 18, 2005
TO ALL RADIO AMATEURS
BID: $ANS-352.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

SSETI ?O-??
Catalog Number: 28894
Launch Date: October 27, 2005

Status: In orbit - being commissioned

A daily report of the launch campaign is being maintained at
http://sseti.gte.tuwien.ac.at/express/mop/index.php?uri=news.html
This mission operations site is completely up-to-date regarding Kepler TLEs
and other LEOP "Launch and Early Operations Phase" details.

The SERACC software, needed to decode and submit the received data to the
SSETI database, together with some audio files containing recorded 9k6
signal to experiment with is also now available

The ESA website about SSETI Express is at:
http://www.esa.int/SPECIALS/sseti_express/SEMARJ7X9DE_0.html

The latest version of the SSETI Express handbook can be downloaded free
of charge from the AMSAT-UK website at:
http://www.uk.amsat.org/

More SSETI Links at:

SpaceDaily has a report about SSETI at:
http://www.spacedaily.com/news/internet-04zzzu.html

You can find more info about SSETI at:
http://sseti.gte.tuwien.ac.at/WSW4/

Latest news about SSETI can be found at:
http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php

Look at the website for the SSETI Express webcam
http://sseti.gte.tuwien.ac.at/WSW4/webcam.htm
[ANS-WSR thanks Graham, UA/G3VZV and Trevor, M5AKA for the above]
[11202005]
======
POSAT-1 PO-28
Catalog Number: 22829
Launched : September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 435.250 MHz
435.275 MHz

Uplink: 145.925 MHz
145.975 MHz

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

PO-28 (POSAT-1), Portugal's first satellite, launched 12 years ago,will
be turned over to Amateur Radio use in the very near future. That was the
word July 30 from AMSAT-UK Secretary Jim Heck, G3WGM, during the AMSAT-UK
International Space Colloquium in Guildford, England.

Launched September 25, 1993, the satellite operated as a packet
store-and-forward BBS (9600 baud FM FSK) on Amateur Radio frequencies for
several weeks in early 1994. Over the years, PO-28's primary usage has been
commercial, although plans have called for eventually shifting its operation
to ham radio use. G3WGM reports that following lengthy negotiations it has
been agreed thatthe satellite can be switched permanently to amateur
frequencies. The change over is expected to take a couple of weeks.

The Portuguese satellite was built at the University of Surrey as part
of a collaborative satellite technology program that involved industry and
academe. Uplink frequencies will be 145.925 and 145.975 MHz. Downlink
frequencies will be 435.250 and 435.275 MHz. More information on PO-28 is
on the AMSAT Web site

http://www.amsat.org/amsat/sats/n7hpr/po28.html.

Uplink Frequencies: 145.925 and 145.975 MHz
Downlink Frequencies: 435.250 and 435.275 MHz

Orbit: 822 x 800 km, 98.6 deg inclined, sun-synchronous.

Transponder capabilities include FM repeater and 38k4 data. If you want
to hear how loud this satellite is, listen on 429.950 until the change
back to amateur radio service.

Keplerian elements for PO-28 are currently contained in the AMSAT keps
bulletins and at Celestrak in amateur.txt using the name "POSAT". Users of
Space Track should query the NORAD Satellite ID number 22829. The name
listed by Space Track is "EYESAT A".

More information of POSAT-1 can be found at:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
http://www.amsat.org/amsat/sats/n7hpr/po28.html
[ANS-WSR wishes to thank Duane Naugle, KO6BT, for this week's update.]
[11062005]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon: 145.810 MHz (unmodulated carrier)

AO-10 has been locked into a Mode-B, 70-cm uplink and
2-meter downlink for several years.

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Non-operational

Uplink: 145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink: 435.812 MHz SSB
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Alberto E. Zagni - I2KBD reports on 02/13/05
The spacecraft is in MBL (safe mode) and is trasmitting just 6 channels
of telemetry. Temperatures and voltage are nominal, but there seems to
be a problem with the onboard receiver, refusing to accept commands.
The spacecraft was launched in 1993, thus nearing 12 years in orbit...

Best regards
Alberto E. Zagni - I2KBD
ITAMSAT Mission Director

More information of IO-26 can be found at:

http://joshua.micronet.it/english/itamsat/itamsathome.html
http://www.amsat.org/amsat/sats/n7hpr/io26.html
www.itamsat.org

[02132005]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon: 29.408 MHz
Robot: 29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB
Beacon: 145.860 MHz
Robot: 145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439

Launch Date: December 26, 1994

Status: Non-operational?

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB
Beacon: 29.352 MHz (intermittent)
SSB meeting frequency: 29.380 MHz (unofficial)

John, KD6PAG reports on June 16, 2004 to WSR:
RS-15 beacon seemed to be back in the mode where it's a tone about 5
seconds off and then 5 seconds on this morning.

WSR is looking for more confirmations of RS-15 coming back.

[ANS-WSR thanks John, KD6PAG for RS-15 information]
[06202004]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplink: 145.84 145.86 145.88 145.90 MHz FM
(using 1200-baud Manchester FSK)
CW downlink: 437.125 MHz
Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)
Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM
Broadcast Callsign: HLO1-11
BBS: HLO1-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a
non-operational status.
[05092004]
=====
KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM (9600-baud FSK)
Downlink: 436.500 MHz FM
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink frequency (listed on the PanSat web site) 436.500 MHz

The satellite is not available for general uplink transmissions.

The Naval Postgraduate School developed PanSat. At the time of
launch, PanSat spread-spectrum digital transponders were to
be available to Amateur Radio operators along with software to utilize
this technology.

The satellite is still operating, however, the spread spectrum packet
radio portion never took place. The spacecraft is now beyond it's
initial 2-year mission life, but telemetry records are still being
downloaded.

For more information, visit the official PanSat web site at:
http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS-WSR has no further information]
[05232004]
=====
SO-35 SUNSAT
Catalog Number: ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlink: 437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA
web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplink V-band 145.840 - 145.990 MHz CW/LSB
U-band 435.550 - 435.800 MHz CW/LSB
L1-band 1269.250 - 1269.500 MHz CW/LSB
L2-band 1268.325 - 1268.575 MHz CW/LSB
S1-band 2400.350 - 2400.600 MHz CW/LSB
Downlink: S2-band 2401.225 - 2401.475 MHz CW/USB
K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon: 2401.323, 24,048.035
[05232004]

SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational
Downlink: 437.075 MHz
Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz
Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
callsign KE6QMD, as per the user service agreement located at the
following
URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink: 145.850 or 145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[11202005]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Semi-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

AO-49 (SAFIR-M) is a German amateur radio payload onboard the small German
scientific satellite "RUBIN-2".

AO-49 was built by the German amateur radio association "AATiS e.V." (German
acronym for "Arbeitskreis Amateurfunk und Telekommunikation in der Schule",
which means: 'working group for amateur radio and telecommunications in
schools'). AO-49 is designed as a "store and broadcast" system for APRS
based messages, dedicated for the use of schools in combination with the
existing WX-Net and planned buoy experiments in Germany.

No transmissions detected since the 1st of February 2003! It appears AO-49
is not properly aligned to illuminate the solar panels. This should end
soon. Due to its orbit, AO-49 will be in a phase without eclipses until
13Feb03.

Martin DG8UAU has written a small software program "SAFIR-M Decoder" to
allow decoding of the received DATA0 frames. It is available at:
http://amend.gmxhome.de in the section Aktuelles.

Details on AO-49 (SAFIR-M) can be found at:
http://amend.gmxhome.de

Information about AATiS e.V. is available at:
http://www.aatis.de
[11132005]
NNNN
/EX

SB SAT @ AMSAT <KB9MMC $ANS-352.S4
WSR 352 Part 4 12/18/2005

AMSAT NEWS SERVICE BULLETIN 352.S4 FROM AMSAT HQ
SILVER SPRING, MD, December 18,2005
TO ALL RADIO AMATEURS
BID: $ANS-352.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE
PROPOSED FOR LAUNCH AT THIS TIME:

UCISAT ?O-??
Catalog number:
Proposed Launch Date: October 31, 2005

Status: Under Construction

Downlink: Submission in Progress
Uplink: Submission in Progress
Callsign: Submission in Progress
[11272005]
=====
PHASE 3E ?O-??
Catalog Number:
Proposed Launch Date: Early 2006

Status: Under Construction

For the latest project status update please visit the AMSAT-DL
P3-E web page:
http://www.amsat-dl.org/p3e/

[ANS-WSR wishes to thank William Leijenaar, PE1RAH for this week's report]
[10022005]
=====
CP1 ?o-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N6CP
Proposed Transmit Frequency: 436.845
[03272005]
=====
CP2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.325
[03272005]
=====
HAUSAT1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: D90HP
Proposed Transmit Frequency: 437.465

[03272005]
=====
ICE Cube 1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: W2CXM
Proposed Transmit Frequency: 437.305
[03272005]
=====
ICE Cube 2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N2VR
Proposed Transmit Frequency: 437.425
[03272005]
=====
ION ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.505
[03272005]
=====
KUTEsat ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: KC0RMW
Proposed Transmit Frequency: 437.385
[03272005]
=====
MEROPE ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: K7MSU-1
Proposed Transmit Frequency: 145.980
[03272005]
=====
nCUBE1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
2407.25
[03272005]
=====
RINCON ?O-??

Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
437.345
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SEEDS ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: JQ1YGU
Proposed Transmit Frequency: 437.485
[03272005]
=====
Mea Huaka ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.405
[03272005]
=====
SUITSAT ?O-??
Catalog Number:
Proposed Release Date: December 8th, 2005

Proposed Callsign: RS0RS ?
Proposed Transmit Frequency: 145.990

This from Frank, KA3HDO:
I have recieved information that the Russian EVA that will deply SuitSat,
planned for December 8th, has been delayed to late January/Early February
2006. As we get more information, we will post it.

[ANS-WSR wishes to thank Frank Bauer, KA3HDO for this weeks report]
[11272005]
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/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James K. Darrow, KB9MMC.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

431. ANS-352 AMSAT Weekly News Bulletin

Newsgroup: rec.radio.amateur.space
Date: 2005-12-21 04:36:53 UTC
From: JoAnne Maenpaa <wb9jej_no-spam@earthlink.net>
Message-ID: <FZ4qf.7720$3Z.2606@newsread1.news.atl.earthlink.net>
Source record: 1895

AMSAT NEWS SERVICE
ANS-352

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* Straight Key Night on OSCAR 2006
* OSCAR-11 REPORT for December
* PCSAT-1 Enters Eclipse Cycle
* Amateur Station Hears MRO at 45 Million Miles
* ARISS Status for the week of December 12, 2005
* FM Satellites: Remember to Listen for N5AFV Aboard a Cruise Ship
* First Announcement of January 2006 Amsat Kid's Day on AO-51
* AMSAT Awards This Week

SB SAT @ AMSAT $ANS-352.01
Straight Key Night on OSCAR 2006

AMSAT News Service Bulletin 352.01
From AMSAT HQ SILVER SPRING, MD.
December 18, 2005
To All RADIO AMATEURS
BID: $ANS-352.01

Once again, AMSAT-NA is pleased to sponsor Straight Key Night on OSCAR for enjoyment by all radio amateurs.

OSCAR SKN 2006 will run for 24 hours, 0000-2400 UTC, on 1 January 2006. It's very simple: no rules, no scoring, and no need to send in a log. Just operate CW through any OSCAR satellite using a straight hand key, working as many other SKN participants as you can. Contacts via the moon (OSCAR Zero) count too.

As in past years, all participants are requested to nominate one of the operators they worked for "Best Fist" recognition. Your nominee need not have the best fist of those you heard, just of those you worked.

Please send all nominations to Ray Soifer via w2rs@arrl.net.

A list of those nominated will be published via the AMSAT News Service in early February, and in The AMSAT Journal.

[ANS thanks Ray, W2RS for the above information]

/EX

SB SAT @ AMSAT $ANS-352.02
OSCAR-11 REPORT for December

AMSAT News Service Bulletin 352.02
From AMSAT HQ SILVER SPRING, MD.
December 18, 2005
To All RADIO AMATEURS
BID: $ANS-352.02

During the period 21 November to 14 December 2005 the VHF beacon on 145.826 MHz has been heard from 05 to 10 December.

Signals have been very variable during this period. Sometimes received at good strength, at other times they were inaudible, even with the BFO switched ON (ie. in CW mode).

If the watchdog resets as expected, then the beacon should restart around 31 December. However, more observations are needed to confirm the timing of the watchdog timer, and whether it is being reset prematurely. Therefore, it may be worth listening for the satellite a few days before 31 December.

The on-board clock continues to show a very large error. On 09 December it was 21.8 days slow.

All the analogue telemetry channels, 0 to 59 are zero, ie they have failed. The status channels 60 to 67 are still working.

The eclipses have now ended, and the satellite should be in continuous sunlight for the remainder of this year, and next year until early May. This should help the satellite to continue transmitting, although continuous sunlight can cause problems due to excessive temperatures. Power supply problems can be caused by poor earth pointing attitude, ie the sunlight illuminating the ends of the satellite, instead of the solar arrays.

The watchdog timer appears to be operating on the 20 day cycle, ie. approximately ten days ON followed by 10 days OFF. It appears to be unaffected by problems of the on-board clock. However, poor solar attitude, and battery problems, may be combining to produce a low 14 volt line supply. This appears to be causing the beacon to switch OFF prematurely, and resets the watchdog timer cycle. It seems very likely that the battery is now unable to retain its charge, due to having endured around 100,000 partial charge/discharge cycles, always a problem with NiCad cells. When analogue telemetry was transmitted, it showed an unexplained current drain from the 14 volt line. This just adds to the present problems.

The Beacon frequencies are -
VHF 145.826 MHz. AFSK FM ASCII Telemetry
UHF 435.025 MHz. OFF
S-band 2401.5 MHz. OFF

Listeners to OSCAR-11 may be interested in visiting my website which contains an archive of news & telemetry data. It also contains details about using a soundcard or hardware demodulators for data capture. There is software for capturing data, and decoding ASCII telemetry. The URL is www.users.zetnet.co.uk/clivew/

[ANS thanks Clive G3CWV for the above information]

/EX

SB SAT @ AMSAT $ANS-352.03
PCSAT-1 Enters Eclipse Cycle

AMSAT News Service Bulletin 352.03
From AMSAT HQ SILVER SPRING, MD.
December 18, 2005
To All RADIO AMATEURS
BID: $ANS-352.03

The PCSAT-1 digipeater on 145.825 was still going strong and working well up until December 15.

The activity page http://pcsat.aprs.org shows about 75 stations accessed PSCAT-1 between December 13 and 14. This won't last much longer since PCSAT-1 is now back to 30 minute eclipses headed towards worst-case of 35 minutes during the week of December 18-25.

Sometime before 2202z on the 15th PCSAT-1 suffered a reset to W3ADO-1 and lost its low power settings. Now at 1740z on the 17th, the US Naval Academy Satellite Lab sent the restore commands, but with 33 minute eclipses, it is doubtfull they will hold. We may have lost her until March, 2006.

The command station at the US Naval Academy should be able to keep PCSAT-1 alive indefinately as long as stations do not user her in the dark and the command stations never let her 68 hour command watch-dog timer time out.

Anyone can work PCSAT-1 with ANY typical 1200 baud packet station on 145.825. Just set your path to UNPROTO APRS via ARISS (the same that you use via ARISS on the ISS or via PCSAT2). Mobiles with the D700 or the TH-D7 HT APRS radios will see packets directly on their front panel and can work it from their mobile.

For more information see:
http://www.ew.usna.edu/~bruninga/pcsat.html

[ANS thanks Bob, WB4APR and the US Naval Academy Satellite Lab for the above information]

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SB SAT @ AMSAT $ANS-352.04
Amateur Station Hears MRO at 45 Million Miles

AMSAT News Service Bulletin 352.04
From AMSAT HQ SILVER SPRING, MD.
December 18, 2005
To All RADIO AMATEURS
BID: $ANS-352.04

This week the Mars-Net e-mail list reported that Paul Marsh, an amateur observer, has detected Mars Reconnaissance Orbiter at X band at a range of 45 million miles from Earth.

The MRO transmits on Deep Space Network channel 32 which is 8439.444444 MHz. By the time that reaches Earth, due to doppler the frequency has dropped to around 8439.031 MHz. The MRO has a 3 meter diameter dish antenna driven by a 100 Watt X-band TWTA to transmit signals to Earth. The signal coming in our direction is of the order of 4.2 mega watts of RF.

The signal was clearly visible in the FFT display of an SDR-14 software radio, and was just audible in SSB bandwidth of a communications receiver. The signal was consistently about 6 to 8 dB above the noise floor. More details can seen at: http://www.uhf-satcom.com/mro/.

[ANS thanks Joe, KM1P, the Mars-net list, and Uhf-satcom.com for the above information]

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SB SAT @ AMSAT $ANS-352.05
ARISS Status for the week of December 12, 2005

AMSAT News Service Bulletin 352.05
From AMSAT HQ SILVER SPRING, MD.
December 18, 2005
To All RADIO AMATEURS
BID: $ANS-352.05

1. Texas Contact Successful

On Thursday, December 8, Sanderson High School in Sanderson, Texas experienced a successful contact with Bill McArthur, KC5ACR. Bill was able to answer 18 questions posed to him by 10 students, as an audience of approximately 25 students, teachers, parents, and others looked on. Local dignitaries who attended the event included the county judge and the county sheriff. Among the media that covered the contact were The Terrell County News Leader, The Davis Mountain Times (Fort Davis, TX), The Big Bend Sentinel (Alpine, TX) and The Alpine Avalanche (Alpine, TX).

2. Upcoming School Contacts

Mt Carmel High School in San Diego, California made a contact on
Thursday, December 15 at 15:42 UTC via KG6EQU.

Carman Park Elementary School, a crew pick, located in Flint,
Michigan, has been approved for an ARISS contact. It will take
place on Wednesday, December 21 at 16:35 UTC via the telebridge
station, WH6PN. The Carman Park contact will be webcast.
To join the event:
URL: <https://e-meetings.mci.com>
CONFERENCE NUMBER: 5169963
PASSCODE: SPACE STATIO

The audio will also be available through EchoLink AMSAT (node 101377)
and EDU_Net (node 77992) conference room servers and will be broadcast
into the IRLP Discovery Reflector 9010, with streaming audio available
from the Discovery Reflector Web Site, http://www.discoveryreflector.ca/

3. McArthur Still Active on Voice

Over this past week, Bill McArthur, KC5ACR, made contacts with stations
in the U.S. on December 6. He also spoke with stations in Australia,
New Zealand and the U.S. on December 11.

4. Astronaut Training Status

Astronaut Michael Lopez-Alegria, who passed his amateur radio license
exam on Wednesday, November 30 has been issued the callsign KE5GTK.

[ANS thanks Carol, KB3LKI for the above information]

/EX

SB SAT @ AMSAT $ANS-352.06
FM Satellites: Remember to Listen for N5AFV Aboard a Cruise Ship

AMSAT News Service Bulletin 352.06
From AMSAT HQ SILVER SPRING, MD.
December 18, 2005
To All RADIO AMATEURS
BID: $ANS-352.06

Allen, N5AFV is at sea in the Carribean with his FM satellite gear on a
cruise ship sailing from Port Everglades, FL to the island of Dominica
and back. He plans to work the FM birds AO-27, SO-50 and AO-51 using his
Icom W32A HT and an AL800 telescoping antenna.

While Allen plans shipboard operation, and has done so successfully in the
past, there is always the possibility that he will not be allowed to operate
from the ship. If that happens, Allen will try to operate onshore at the
ports of call where he can do so.

Itinerary
Dec 17, Leave Port Everglades, FL, 1700 EST
Call signs N5AFV and N5AFV/C6A
Dec 18, Nassau, Bahamas, 0800-1600 local time

Call sign N5AFV/C6A
Dec 19, At Sea
Call sign N5AFV/C6A
Dec 20, San Juan, PR, 1300-2300 local time
Call sign KP4/N5AFV
Dec 21, St. Thomas, USVI, 0800-1700 local time
Call sign KP2/N5AFV
Dec 22, Dominica, 1200-1900 local time
Call sign J79AFV
Dec 23, St. Barts, 0800-2300 local time
Call sign FJ/N5AFV
Dec 24, Tortolla, BVI, 0800-1500 local time
Call sign VP2V/N5AFV
Dec 25, At Sea
Call sign N5AFV/C6A
Dec 26, At Sea
Call sign N5AFV/C6A
Dec 27, Arrive Port Everglades, FL, 0700 EST
Call sign N5AFV

[ANS thanks Allen, N5AFV for the above information]

/EX

SB SAT @ AMSAT $ANS-352.07
First Announcement of January 2006 Amsat Kid's Day on AO-51

AMSAT News Service Bulletin 352.07
From AMSAT HQ SILVER SPRING, MD.
December 18, 2005
To All RADIO AMATEURS
BID: $ANS-352.07

January 2006 Amsat Kid's Day on AO-51

Amsat-NA, the AO-51 Command Team, and the AO-51 Operations Team
will sponsor Kid's Day on AO-51 on January 8, 2006. The event
will run from approximately 0100 UTC 8 January until 0345 UTC
9 January. The event is open to all kids, worldwide. We ask
all amateur radio stations to give this short time window to
promote satellite operations with kids, by actually showing a
kid how to make contacts via AO-51, providing a station to contact,
or stepping aside to allow others to make contacts with the kids.
During the event, please limit contacts to stations that are
operating with kids at the microphone. This should allow the
kids to have a nice QSO and pass some information. Kids can tell
their name, age, who is helping them operate on AO-51, where they
live, and other information about themselves.

AO-51 will be configured in the following mode during the event.
Please note the change in the uplink frequency for the event.
The PL tone will be turned off for the event.

Uplink: 145.880 mhz FM voice
Downlink: 435.300 mhz FM voice

The digital transponder on 435.150 will be turned off during
the event.

See http://www.arrl.org/FandES/ead/kd-rules.html on the ARRL
website for more Kids Day information.

Have fun and enjoy AO-51!

73 KE4AZN
Amsat VP-Operations
Echo Command Station

[ANS thanks Mike, KE4AZN for the above information]

/EX

SB SAT @ AMSAT $ANS-352.08
AMSAT Awards This Week

AMSAT News Service Bulletin 352.08
From AMSAT HQ SILVER SPRING, MD.
December 18, 2005
To All RADIO AMATEURS
BID: $ANS-352.08

Bruce Paige, KK5DO, AMSAT Director Contests and Awards says
this week, congratulations go out to all of the following.

Kenneth Beck, WI7B, South Africa AMSAT Communication Achievement Award #US92

Ernie Howard, W8EH, 51 on 51 Award #47
Peter Meier, DC7TS, 51 on 51 Award #48
James Clay, ND9M, 51 on 51 Award #49

To see all the awards visit http://www.amsat.org.

[ANS thanks Bruce, KK5DO for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the
President's Club. Members of the President's Club, as sustaining donors
to AMSAT Project Funds, will be eligible to receive additional benefits.
Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
JoAnne Maenpaa, WB9JEJ
WB9JEJ at amsat dot org

432. APRS users

Newsgroup: rec.radio.amateur.space
Date: 2005-12-21 09:33:04 UTC
From: hxc98@yahoo.com
Message-ID: <1135157584.607233.70460@g49g2000cwa.googlegroups.com>
Source record: 1896

If you use MapPoint with either APRSPoint or UI-View, you can update MapPoint 2004 with the latest map data very inexpensively. All you need is a copy of Streets 2006 or AutoRoute 2006. Go to http://www.aprspoint.com/ for step by step instructions.

433. website

Newsgroup: rec.radio.amateur.space
Date: 2005-12-22 12:25:45 UTC
From: Super DX <superdx@free.fr>
Message-ID: <_Wwqf.508$Lp.315@nntpserver.swip.net>
Source record: 1897

Hi all,

here is a new ham website :

http://superdx.free.fr

73's and Merry Xmas !

Vince

434. اي جمامعة فى منـح تعليمي‌ـة مجانية فى مجال برمجة الكمبيوتر

Newsgroup: rec.radio.amateur.space
Date: 2005-12-24 10:46:36 UTC
From: Dr_mohamed_hassan_83 <Dr_mohamed_hassan_83@yahoo.com>
Message-ID: <1135421196.396576.263120@g43g2000cwa.googlegroups.com>
Source record: 1898

من يرغب فى دراسة برمجة الكمبيوتر فهناك
شركة تدعى مؤسسة النمام العربى تقدم منح
مجانية - للمزيد من المعلومات

Oracle 10G Developer Users - OCP
Oracle application server
Oracle designer
Oracle 10g database administration - OCA

Microsoft Certified Solution Developer - MCSD
Microsoft Certified Systems Engineer - MCSE
International Computer Driving Licence - ICDL

CISCO - CCNA
CISCO - CCNP

Multimedia - 2D
Multimedia - 3D

Linux - power user
Linux - adminstration

PHP

Java programming

System analysis
System design

أتصل بمؤسسة النمام العربى فى 4522041
القاهرة
http://www.egyptwebs.tk

435. اي جمامعة فى منـح تعليميـة مجانية فى مجال برمجة الكمبيوتر

Newsgroup: rec.radio.amateur.space
Date: 2005-12-24 10:46:51 UTC
From: Dr_mohamed_hassan_83 <Dr_mohamed_hassan_83@yahoo.com>
Message-ID: <1135421210.956383.249490@g47g2000cwa.googlegroups.com>
Source record: 1899

من يرغب فى دراسة برمجة الكمبيوتر فهناك
شركة تدعى مؤسسة النمام العربى تقدم منح
مجانية - للمزيد من المعلومات

Oracle 10G Developer Users - OCP
Oracle application server
Oracle designer
Oracle 10g database administration - OCA

Microsoft Certified Solution Developer - MCSD
Microsoft Certified Systems Engineer - MCSE
International Computer Driving Licence - ICDL

CISCO - CCNA
CISCO - CCNP

Multimedia - 2D
Multimedia - 3D

Linux - power user
Linux - adminstration

PHP

Java programming

System analysis
System design

أتصل بمؤسسة النمام العربى فى 4522041
القاهرة
http://www.egyptwebs.tk

436. No link attitude!

Newsgroup: rec.radio.amateur.space
Date: 2005-12-26 04:33:36 UTC
From: n9zle <NoSpam@nospam.com>
Message-ID: <AoKrf.37466$dO2.19951@newssvr29.news.prodigy.net>
Source record: 1750

No link attitude!

http://www.n9zle.com/forum/

What is it with this no-link to other site attitude?
Years ago when the internet was in its infancy just about any site would add your site as a link from theirs. In return you would do the same. But now it has come to NO-LINKS. Not even in the forums. I have had a website located on tripod for about 9 years over those nine years I had a link to qrz dot com That site received over a million hits. And many users went from that site to qrz and on-to Icomamerica dot com. I have always supported Icom. They have never given a link on their site to mine. I have always supported qrz. But of course he(AA7BQ) never put a link on his site to mine. Well you may say that "I never asked". And that is true. But recently I have noticed he has been deleting my posts. ALL OF THEM. He never contacted me telling me why. AA7BQ just deleted them. I build CIV cables and sell a few of them every week to amateur operators who want them. When I posted one on his site. I found he deleted the post soon after it was placed there.

My beliefs are.
1. QRZ AKA AA7BQ no longer has the amateur radio attitude.
2. AA7BQ has gone fully commercial but calls his site "The Ham Radio Super Site"
3. AA7BQ does not have your best interest in mind.

I can also prove what I am writing here.
For one if he claims he is nothing but a commercial site then why does he ask for donations?
If he is not a commercial site than why will he not allow me to post my CIV cables on his site?

That takes care of number 2
Now for number 1 and 3. If some one knows the truth about something but keeps it from you he is a liar.
No mater how you put it, he is a liar. On the QRZ site Fred is there to help you renew your license. Or so he leads you to believe so. He charges you for it. Mr. Lloyd has never revealed it to any amateurs that you can renew your license or do an address change at the fcc.gov web site for FREE. Yes TOTAL FREE at the FCC web site.
The forms at the FCC web site or no harder to fill out than his.

His CD. He charges 24.95 plus tax and shipping. On that CD is data he obtained from the FCC and got it for FREE, he sales it to you. Also he has software, created by programmers like MYSELF. And MODS that have been made available from the manufactures and other HAMS like ME! I have been contributing to Amateur Radio community for greater than 10 years, and have

received very little for software I created. Never complained when it was copied. I have performed and created several of the MODS for various transceivers. Never asked a penny for it. I never commercialized HAM RADIO. And NEVER took money from some one for something they could get FREE else where.

I am sure many of you would like to ask me "what I am going to do about it?" Here is my answer.

I have created an open forum on my web site http://www.n9zle.com/forum/

There you can post a link to your own site even if it is a commercial site. You can post any ham radio equipment you have for sell on the site.

You can do a callsign lookup at my site from the FCC database, not that stupid qrz thing.
I will soon put together an open source database that I will sell for the price of the CD plus the true cost of shipping. About two bucks total. Once you install the database on your system, you will be able to download updates for FREE. I will make drivers available to programmers to access the database in several different languages and operating systems. I will also attempt to make the database available on the internet for FREE to download.

I only ask for a little help from other HAMS like myself. I need a few elmers that are willing to moderate some of the forums. It is easy and you will find it fun. If you have any suggestions on new forums or sections please logon to my site and make a post.

73s N9ZLE

437. WSR-359 AMSAT Weekly Satellite Report

Newsgroup: rec.radio.amateur.space
Date: 2005-12-26 20:41:20 UTC
From: JoAnne Maenpaa <wb9jej_no-spam@earthlink.net>
Message-ID: <QzYrf.645$M%4.471@newsread3.news.atl.earthlink.net>
Source record: 1751

This report is organized into 4 parts.
Part 1 - operational analog amateur satellites.
Part 2 - operational digital amateur satellites.
Part 3 - non - operational satellites
Part 4 - proposed satellites

SB SAT @ AMSAT <KB9MMC $ANS-359.S1
WSR 359 Part 1 12/25/2005

AMSAT NEWS SERVICE BULLETIN 359.S1 FROM AMSAT HQ
SILVER SPRING, MD, December 25, 2005
TO ALL RADIO AMATEURS
BID: $ANS-359.S1

VO-52 HAMSAT
Catalog Number: 28650
Launch Date: May 05,2005

Status: Testing
Current Mode: U/V - Dutch Transponder

Proposed frequencies:

Indian Transponder:
Uplink : 435.220 MHz to 435.280 MHz LSB/CW
Downlink: 145.870 MHz to 145.930 MHz USB/CW
Beacom : 145.859330 MHZ CW

Dutch Transponder:
Uplink : 435.225MHz to 435.275MHz LSB/CW
Downlink: 145.875MHz to 145.925MHz USB/CW
Beacon : 145.860MHz 12WPM with CW message

This from William Leijenaar, PE1RAH:
Dear AMSATs,

I wish I had the same free time now as when I designed the HAMSAT and P3e transponder. Unfortunatly these times have been changed (for the moment) due to QRL things.

However, I often try to be QRV on the HAMSAT and check the signals from my transponder and read the messages on amsat-bb. I just read about the beacon "problem". The "problem" with the beacon is actually not a problem but it is known. The beacon signal is injected at the IF, and runs throught the transponder from the IF section, up converter, via the final PA to the antenna.

The changes you hear on the beacon frequency is caused by the amplitude limiters in the IF that are activated by a too strong uplink signal. These limiters are only for protection, to avoid that the IF and VHF amplifiers get overloaded and generate all kinds of unwanted signals at the output.

My transponder is straight forward to keep it physical small and cheap in cost (as I had no sponsors). Unlike most other transponders my transponder on HAM-SAT has no AGC system. It gives always maximum gain with maximum sensitivity.

The main reason is that the AGC systems I had didn't fit in the small sized box. As an option I choose for limiters, and it worked great in tests.

Secondly, I tought limiters might be helpfull against aligators. To deal with too strong signals most transponder have an AGC to lower the RX gain, and actually be helpfull to the alligators. With the limiters their SSB signal will get distorted and they might lower their powers to have better audio quality.

The change in beacon sound is an indication for too much uplink powers and will be heared mainly in areas where higher powers are available on the up-link, like US, Europe, Japan...

Its funny to know that nobody here has discovered that the bandpass is shifted some down in frequency... There is no technical failure, the reason is known here... No panic please :o)

Please keep in mind that this transponder is my privat work and privat money. Frankly speaking this is my privat transponder I "give" to the amateur world. I was one of those many poor students, and this was the best I could do with my resources I had available at that time... The whole thing is just 16cm x 10cm x 3cm !! even smaller than the professional Indian transponder :o)

I hope you all enjoy my transponder even when it is not perfect.
[11272005]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - V/U 9k6
VOICE REPEATER - V/U FM

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
Analog voice uplink: 145.880 MHZ FM
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast

Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

This from the AO-51 Command team:

The Digipeater function on AO-51 has been turned on for a "Trial Test Session". The test may be paused at any time. Please keep your digi packets down to a reasonable level as this is a shared resource. Only one uplink is in use, so the PBBS users and digi users are going to be on the same uplink frequency. This is a shared uplink and downlink with the PBBS, so do not overload it with continuous, or high duty rate, beacons or broadcasts.

This is not the 10 watt plus transmitter that is on the ISS. It will take a higher gain receiving station to hear the 9k6 signal of AO-51. You will not need a strong signal for the uplink though, as AO-51 hears very well. Note that the uplink and downlink are both at 9600 baud.

Downlink: 435.300 FM 9600 baud
Uplink: 145.860 FM 9600 baud
Digi Callsign: PACB-1

If you are using TlmEcho there is a bug in the program regarding the Digipeat Status display. That has been fixed in the new version, and a number of new features added as well. A new version of TlmEcho is expected to be released soon.

For the time being, if you monitor the 9k6 downlink you can use the LSTAT status message to verify that the digipeater is turned on. If the message contains "d:1", then the digi function is enabled. If it contains "d:0" the digi is turned off.

Mike, KE4AZN, added, "I want to personally thank Jeff, KB2M, and Gould, WA4SXM, for their help in testing the digipeat function."

[ANS thanks Mike, KE4AZN for the above information]

January 2006 Amsat Kid's Day on AO-51

Amsat-NA, the AO-51 Command Team, and the AO-51 Operations Team will sponsor Kid's Day on AO-51 on January 8, 2006. The event will run from approximately 0100 UTC 8 January until 0345 UTC 9 January. The event is open to all kids, worldwide. We ask all amateur radio stations to give this short time window to promote satellite operations with kids, by actually showing a kid how to make contacts via AO-51, providing a station to contact, or stepping aside to allow others to make contacts with the kids. During the event, please limit contacts to stations that are operating with kids at the microphone. This should allow the kids to have a nice QSO and pass some information. Kids can tell their name, age, who is helping them operate on AO-51, where they live, and other information about themselves.

AO-51 will be configured in the following mode during the event.
Please note the change in the uplink frequency for the event.
The PL tone will be turned off for the event.

Uplink: 145.880 mhz FM voice
Downlink: 435.300 mhz FM voice

The digital transponder on 435.150 will be turned off during
the event.

See http://www.arrl.org/FandES/ead/kd-rules.html on the ARRL
website for more Kids Day information.

Have fun and enjoy AO-51!

73 KE4AZN
Amsat VP-Operations
Echo Command Station

[ANS-WSR thanks Mike Kingery, KE4AZN for the above information]
[12252005]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launched: December 20, 2002

Status: Operational.

Uplink: 145.850 MHz (67.0 Hz PL tone) (See below for operating
procedures)
Downlink: 436.795 MHz

There have been unconfirmed reports on the amsat-bb remailer that SO-50 has
shifted downlink frequency as much as 5khz up. This both from Europe.

To switch the transmitter on, you need to send a CTCSS tone of 74.4 Hz. The
order of operation is thus: (allow for Doppler as necessary)

1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute timer
on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the repeater
on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset the 10
minute timer.
[09122004]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: OPERATIONAL

Voice/CW Mode JA
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB

Beacon: 435.795 MHz

Digital Mode JD
Uplink: 145.850 145.870 145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

John, N4QWL reports on July 16th, 2005:
Last evening I had a AOS to LOS qso with WI2W. FO-29 came up at 01:17z here in FM07 and I found WI2W and we chatted until 01:33z. The satellite was at 2 degrees elevation when I finally heard him start to crackle a bit. What a great QSO! To think that I watched this bird launch back in 1996 and it is still working so well is a real thrill. I believe I still have the video. I might just look for it and watch it again. Boy do I love this satellite stuff! Look for you all up there.

Please send the reception reports to lab2 'at' jarl.or.jp.
Please use the subject line: 'FO-29 reception report'.

Mineo, JE9PEL, has an FO-29 satellite telemetry analysis program that will automatically analyze all digital telemetry from the satellite (such as current, voltage and temperature). FO29CWTE is available at:
http://www.ne.jp/asahi/hamradio/je9pel/
[ANS-WSR wishes to thanks John, N4QWL for this week's report]
[11132005]
=====
AO-27 AMRAD
Catalog number: 22825
Launched: September 26, 1993

Status: Operational

Uplink: 145.850 MHz FM
Downlink: 436.795 MHz FM

The latest information on AO-27 from control operator Michael Wyrick, N3UC (former N4USI), can be found at:
http://www.ao27.org

An AO-27 question-and-answer page is available on the AMSAT-NA web site, with updates by Ray, W2RS. The URL is:
http://www.amsat.org/amsat/intro/ao27faq.html

[ANS-WSR thanks John, K6YK, for this week's AO-27 report]
[11132005]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Semi-operational in sunlight.
Return to active status: June 21,2002

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A
145.975 to 145.925 MHz CW/USB Mode B
Beacon: 29.502 MHz, 145.972 MHz, 435.1 MHz, 2304.1 MHz

Emily, W0EEC has created a website to allow the users of AO-7 to record
contacts, observations and use of the satellite more effectively at:
http://www.emilyshouse.com/experthams/ao7/main.php
This includes the ability to log contacts.

Tim, K3TZ has written a program to decode AO-07 telemetry. The program can
be downloaded at:
http://www.qsl.net/k3tz/files/K3TZ_AO-07_Telemetry_Decoder_0.5.zip

For more AO-7 info:
http://www.amsat.org/amsat/sats/n7hpr/ao7.html
[11132005]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational
Current Mode: DIGIPEATER
Digipeater: ACTIVE

The current Expedition 12 crew is:
Commander: William McArthur - KC5ACR
Flight Engineer: Valery Tokarev - (no call)

Worldwide packet uplink: 145.990 MHz FM
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Repeater Uplink: 437.800 MHz FM
Repeater Downlink: 145.800 MHz FM
Doppler Shift is 10 KHz

Russian callsigns: RS0ISS, RZ3DZR
USA callsign: NA1SS
Packet station mailbox callsign: RS0ISS-11
Packet station keyboard callsign: RS0ISS-3
Digipeater callsign: ARISS

The ARRL Reports;

ISS commander shooting for WAC, WAS and maybe DXCC from
space

ISS Expedition 12 Commander Bill McArthur, KC5ACR, has proven to be
one of the more active Amateur Radio on the International Space
Station (ARISS) operators among ham radio operators who have
occupied the space station. In fact, McArthur's having so much fun

operating from space that he's hoping to complete Worked All Continents (WAC), Worked All States (WAS) and maybe even DXCC from space.

"Bill McArthur continues to be active on voice and now has a couple of personal goals he is trying to achieve," says ARISS Ham Radio Project Engineer Kenneth Ransom, N5VHO. "He is trying to talk to someone in every state in the United States. According to his log, he has managed to work 37 states so far." In addition, Ransom says, McArthur wants to work as many countries as he can.

"He's off to a good start with 28 DXCC entities in his log as of December 12," he said. "These contacts have been with amateur stations on every continent with the exception of Antarctica." That contact could happen this weekend, however. Although the IARU does not require WAC applicants to have worked Antarctica, Ransom says that ARISS tradition calls for an Antarctica QSO to achieve WAC from space "since the astronauts seem to have an unfair advantage."

Expedition 9 astronaut Mike Fincke, KE5AIT, became the first ISS crew member to contact all seven of the world's continents via Amateur Radio from NA1SS.

States on McArthur's most-needed list are Alaska, Hawaii, Idaho, Missouri, New Hampshire, New Mexico, North Dakota, Pennsylvania, Rhode Island, South Dakota, Vermont, Virginia and Washington.

"The list of DXCC entities is just starting to grow, so he needs a lot right now," Ransom conceded this week, adding that he hasn't included ARISS school group contacts in his counts and hopes McArthur will achieve his goals without them. "We won't know the official results for months after the mission," he added.

McArthur is about halfway through his approximately six-month duty tour aboard the ISS. He and crewmate Valery Tokarev will return to Earth in April.

During Thanksgiving week, McArthur reportedly made some three dozen casual contacts, most of them over North America and a few over Europe and New Zealand. He made contacts with stations in the US on December 6. He also had QSOs with Australia, New Zealand and the US on December 11.

[WSR Thanks the ARRL for the above information]

The ISS Fan Club Webpage < http://www.issfanclub.com > reports that the Digipeater is active as of Nov 14th, 2005 at 0207UTC.

The ISS daily crew schedule can be found at:
http://spaceflight.nasa.gov/station/timelines/
Remember that the crew operates on UTC time. Also, all of the time line is NOT translated from Russian and posted.

More information is available at:
http://www.rac.ca/ariss
http://spaceflight.nasa.gov/station/reference/radio/
http://www.marexmg.org/fileshtml/unprotopage.html
http://www.issfanclub.com
http://oscar.dcarr.org/
[11132005]
NNNN
/EX

SB SAT @ AMSAT <KB9MMC $ANS-359.S2
WSR 359 Part 2 12/25/2005

AMSAT NEWS SERVICE BULLETIN 359.S2 FROM AMSAT HQ
SILVER SPRING, MD, December 25, 2005
TO ALL RADIO AMATEURS
BID: $ANS-359.S2

PCSAT2 ?0-??
Catalog Number: 25544
Launch Date: August 1, 2005

Status: Battery-saving mode
Current Mode: None

Digital Downlink: 435.275 Mhz
Digital Uplink: 145.825 Mhz
PSK-31 Downlink: 435.275 Mhz
PSK-31 Uplink: 29.400 - 29.403 Mhz

Broadcast:
BBS:

PCSAT2 was installed on the exterior of the International Space Station and
was activated on August 3, 2005.

Packets seen from PCSAT2 can be reviewed at:
http://www.findu.com/cgi-bin/pcsat2.cgi

A screen shot of both the 9600 bps and 1200 bps decoded data as seen by
Simon, 9W2QC, can be seen at:
http://www.9w2qc.net/pcsat2/

More information on PCSAT2 can be found at:
http://web.usna.navy.mil/~bruninga/pcsat2.html
[11272005}
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Testing
Curent Mode: PBBS - V/U 9k6
VOICE REPEATER - V/U FM

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
Analog voice uplink: 145.880 MHZ FM
145.920 MHz FM 67Hz PL tone
1268.700 MHz FM 67Hz PL tone

Digital Downlinks: 435.150 MHz FM, 38k4 Digital, PBP, 1 watt output
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM, 9k6 Digital, Pacsat Broadcast
Protocol (PBP)

Broadcast: PECHO-11
BBS: PECHO-12

This from the AO-51 Command team:

The Digipeater function on AO-51 has been turned on for a "Trial Test Session". The test may be paused at any time. Please keep your digi packets down to a reasonable level as this is a shared resource. Only one uplink is in use, so the PBBS users and digi users are going to be on the same uplink frequency. This is a shared uplink and downlink with the PBBS, so do not overload it with continuous, or high duty rate, beacons or broadcasts.

This is not the 10 watt plus transmitter that is on the ISS. It will take a higher gain receiving station to hear the 9k6 signal of AO-51. You will not need a strong signal for the uplink though, as AO-51 hears very well. Note that the uplink and downlink are both at 9600 baud.

Downlink: 435.300 FM 9600 baud
Uplink: 145.860 FM 9600 baud
Digi Callsign: PACB-1

If you are using TlmEcho there is a bug in the program regarding the Digipeat Status display. That has been fixed in the new version, and a number of new features added as well. A new version of TlmEcho is expected to be released soon.

For the time being, if you monitor the 9k6 downlink you can use the LSTAT status message to verify that the digipeater is turned on. If the message contains "d:1", then the digi function is enabled. If it contains "d:0" the digi is turned off.

Mike, KE4AZN, added, "I want to personally thank Jeff, KB2M, and Gould, WA4SXM, for their help in testing the digipeat function."

[ANS thanks Mike, KE4AZN for the above information]
January 2006 Amsat Kid's Day on AO-51

Amsat-NA, the AO-51 Command Team, and the AO-51 Operations Team will sponsor Kid's Day on AO-51 on January 8, 2006. The event will run from approximately 0100 UTC 8 January until 0345 UTC 9 January. The event is open to all kids, worldwide. We ask all amateur radio stations to give this short time window to promote satellite operations with kids, by actually showing a

kid how to make contacts via AO-51, providing a station to contact, or stepping aside to allow others to make contacts with the kids. During the event, please limit contacts to stations that are operating with kids at the microphone. This should allow the kids to have a nice QSO and pass some information. Kids can tell their name, age, who is helping them operate on AO-51, where they live, and other information about themselves.

AO-51 will be configured in the following mode during the event. Please note the change in the uplink frequency for the event. The PL tone will be turned off for the event.

Uplink: 145.880 mhz FM voice
Downlink: 435.300 mhz FM voice

The digital transponder on 435.150 will be turned off during the event.

See http://www.arrl.org/FandES/ead/kd-rules.html on the ARRL website for more Kids Day information.

Have fun and enjoy AO-51!

73 KE4AZN
Amsat VP-Operations
Echo Command Station

[ANS-WSR thanks Mike Kingery, KE4AZN for the above information] [12252005]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Operational

General Usage Uplink/Downlink:145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

Bob WB4APR reports:

The PCSAT-1 digipeater on 145.825 was still going strong and working well up until December 15.

The activity page http://pcsat.aprs.org shows about 75 stations accessed PSCAT-1 between December 13 and 14. This won't last much longer since PCSAT-1 is now back to 30 minute eclipses headed towards worst-case of 35 minutes during the week of December 18-25.

Sometime before 2202z on the 15th PCSAT-1 suffered a reset to W3ADO-1 and lost its low power settings. Now at 1740z on the 17th, the US Naval Academy Satellite Lab sent the restore commands, but with 33 minute eclipses, it is doubtfull they

will hold. We may have lost her until March, 2006.

The command station at the US Naval Academy should be able to
keep PCSAT-1 alive indefinately as long as stations do not user
her in the dark and the command stations never let her 68 hour
command watch-dog timer time out.

Anyone can work PCSAT-1 with ANY typical 1200 baud packet
station on 145.825. Just set your path to UNPROTO APRS via
ARISS (the same that you use via ARISS on the ISS or via PCSAT2).
Mobiles with the D700 or the TH-D7 HT APRS radios will see packets
directly on their front panel and can work it from their mobile.

[ANS-WSR thanks Bob Bruninga, WB4APR and the US Naval Academy
Satellite Lab for the above information]

PCSat is a 1200-baud APRS digipeater designed for use by stations using
hand-held or mobile transceivers. Downlinks feed a central web site at:
http://pcsat.aprs.org

The APRS-equipped PCSat was built by midshipmen from the U.S. Naval Academy
under the guidance of Bob Bruninga, WB4APR.
[12182005]
=====
CUTE-1
Catalog number: 27844
Launched: June 30,2003

Status: Operational

Uplink: ?
Downlink: 436.8375 CW
437.4700 1200 FM ax25 or SRLL (ACTIVE only near Japan ?)
Cliff, K7RR reports:
In the latest Weekly Satellite Report, CUTE 1, #27844 is listed as
OPERATIONAL?
Indeed it is very operational as a CUBESAT sending CW telemetry on
436.8345 MHz. At the July 7 2005, 23:45:20 pass over the Western USA:
CUTE 1 6B A4 xx 7F D7 66A8 4702 FF FF7C 65
CUTE 1 6C A6 59 80 D9 66A8 4702 FF FE7C B6

The June 30th KEPS were within ten seconds of AOS and LOS. It is an very
good object to practice tracking as the orbit and transmitter power are
similar to proposed CUBESATS awaiting launch this December. As a check
for Doppler correction, the lack of change in tone is an excellent
indicator.

CUTE 1 is a Japanese (Tokyo Institute of Technology) one kilogram
nanosatellite that was launched by a Rokot rocket from Plesetsk at
14:15 UT on 30 June 2003. It carries a 100 mW beacon at 436.8375 MHz.
Initial orbital parameters were period 101.4 min, apogee 831 km, perigee
819 km, and inclination 98.7?.

For further info about CUTE-1 goto:
http://lss.mes.titech.ac.jp/ssp/cubesat/operation/Schedule_e.html

[ANS WSR wishes to thank Cliff, K7RR, for this week's information]
[07242005]
=====
GO-32 TECHSAT-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Operational

Downlink: 435.225 MHz FM (9600-baud FSK)
(435.325 n/a - temperature problems)
Uplinks: 145.850, 145.890, 145.930 FM
1269.700, 1269.800, 1269.900 FM
Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

Jeff, KB2M, reports November 15th, 2005:
I might be wrong about this, but as I am the only one I see working GO-32
here goes. If you do a DIR request up on the 145.890 uplink the bird turns
on. Give it a try....

More information of GO-32 can be found at:
http://www.iarc.org/techsat/techsat.html
[ANS-WSR wishes to thank Jeff, KB2M for this weeks report.]
[11202005]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: Semi-operational, the digipeater command is on and open for
APRS users.

Uplink: 145.90 145.92 145.94 145.96 MHz FM
(using 1200-baud Manchester FSK)
Downlink: 437.026 MHz SSB (1200-baud PSK)
Mode-S Beacon: 2401.1428 MHz
Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

A WOD collection of current graphics along with general information
and telemetry samples can be found at:
http://www.telecable.es/personales/ea1bcu
[05092004]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launched: March 1, 1984

Status: Semi-operational?

Telemetry Downlink: 145.826 MHz. FM (1200-baud AFSK).
approx. 10 days ON, 10 days OFF
Mode-S Beacon: 2401.500 MHz. ... OFF
UHFBeacon: 435.025 MHz. ... OFF

During the period 21 November to 14 December 2005 the VHF beacon on 145.826 MHz has been heard from 05 to 10 December.

Signals have been very variable during this period. Sometimes received at good strength, at other times they were inaudible, even with the BFO switched ON (ie. in CW mode).

If the watchdog resets as expected, then the beacon should restart around 31 December. However, more observations are needed to confirm the timing of the watchdog timer, and whether it is being reset prematurely. Therefore, it may be worth listening for the satellite a few days before 31 December.

The on-board clock continues to show a very large error. On 09 December it was 21.8 days slow.

All the analogue telemetry channels, 0 to 59 are zero, ie they have failed. The status channels 60 to 67 are still working.

The eclipses have now ended, and the satellite should be in continuous sunlight for the remainder of this year, and next year until early May. This should help the satellite to continue transmitting, although continuous sunlight can cause problems due to excessive temperatures. Power supply problems can be caused by poor earth pointing attitude, ie the sunlight illuminating the ends of the satellite, instead of the solar arrays.

The watchdog timer appears to be operating on the 20 day cycle, ie. approximately ten days ON followed by 10 days OFF. It appears to be unaffected by problems of the on-board clock. However, poor solar attitude, and battery problems, may be combining to produce a low 14 volt line supply. This appears to be causing the beacon to switch OFF prematurely, and resets the watchdog timer cycle. It seems very likely that the battery is now unable to retain its charge, due to having endured around 100,000 partial charge/discharge cycles, always a problem with NiCad cells. When analogue telemetry was transmitted, it showed an unexplained current drain from the 14 volt line. This just adds to the present problems.

The Beacon frequencies are -
VHF 145.826 MHz. AFSK FM ASCII Telemetry
UHF 435.025 MHz. OFF
S-band 2401.5 MHz. OFF

Listeners to OSCAR-11 may be interested in visiting my website which contains an archive of news & telemetry data. It also contains details about using a soundcard or hardware demodulators for data capture. There is software for capturing data, and decoding ASCII telemetry. The URL is www.users.zetnet.co.uk/clivew/

More information on UO-11 OSCAR-11 can be found at:
http://www.users.zetnet.co.uk/clivew/

MPEG3 files can be found here at Mineo, JE9PEL website:
http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[ANS-WSR thanks Clive G3CWV for the above information]
[12182005]
NNNN
/EX

SB SAT @ AMSAT <KB9MMC $ANS-359.S3
WSR 359 Part 3 12/25/2005

AMSAT NEWS SERVICE BULLETIN 359.S3 FROM AMSAT HQ
SILVER SPRING, MD, December 25, 2005
TO ALL RADIO AMATEURS
BID: $ANS-359.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

SSETI ?O-??
Catalog Number: 28894
Launch Date: October 27, 2005

Status: In orbit - being commissioned

A daily report of the launch campaign is being maintained at
http://sseti.gte.tuwien.ac.at/express/mop/index.php?uri=news.html
This mission operations site is completely up-to-date regarding Kepler TLEs
and other LEOP "Launch and Early Operations Phase" details.

The SERACC software, needed to decode and submit the received data to the
SSETI database, together with some audio files containing recorded 9k6
signal to experiment with is also now available

The ESA website about SSETI Express is at:
http://www.esa.int/SPECIALS/sseti_express/SEMARJ7X9DE_0.html

The latest version of the SSETI Express handbook can be downloaded free
of charge from the AMSAT-UK website at:
http://www.uk.amsat.org/

More SSETI Links at:

SpaceDaily has a report about SSETI at:
http://www.spacedaily.com/news/internet-04zzzu.html

You can find more info about SSETI at:
http://sseti.gte.tuwien.ac.at/WSW4/

Latest news about SSETI can be found at:
http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php

Look at the website for the SSETI Express webcam
http://sseti.gte.tuwien.ac.at/WSW4/webcam.htm
[ANS-WSR thanks Graham, UA/G3VZV and Trevor, M5AKA for the above]

[11202005]
======
POSAT-1 PO-28
Catalog Number: 22829
Launched : September 25, 1993

Status: Operational - Not open for Amatuer use

Downlink: 435.250 MHz
435.275 MHz

Uplink: 145.925 MHz
145.975 MHz

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

PO-28 (POSAT-1), Portugal's first satellite, launched 12 years ago,will be turned over to Amateur Radio use in the very near future. That was the word July 30 from AMSAT-UK Secretary Jim Heck, G3WGM, during the AMSAT-UK International Space Colloquium in Guildford, England.

Launched September 25, 1993, the satellite operated as a packet store-and-forward BBS (9600 baud FM FSK) on Amateur Radio frequencies for several weeks in early 1994. Over the years, PO-28's primary usage has been commercial, although plans have called for eventually shifting its operation to ham radio use. G3WGM reports that following lengthy negotiations it has been agreed thatthe satellite can be switched permanently to amateur frequencies. The change over is expected to take a couple of weeks.

The Portuguese satellite was built at the University of Surrey as part of a collaborative satellite technology program that involved industry and academe. Uplink frequencies will be 145.925 and 145.975 MHz. Downlink frequencies will be 435.250 and 435.275 MHz. More information on PO-28 is on the AMSAT Web site

http://www.amsat.org/amsat/sats/n7hpr/po28.html.

Uplink Frequencies: 145.925 and 145.975 MHz
Downlink Frequencies: 435.250 and 435.275 MHz

Orbit: 822 x 800 km, 98.6 deg inclined, sun-synchronous.

Transponder capabilities include FM repeater and 38k4 data. If you want to hear how loud this satellite is, listen on 429.950 until the change back to amateur radio service.

Keplerian elements for PO-28 are currently contained in the AMSAT keps bulletins and at Celestrak in amateur.txt using the name "POSAT". Users of Space Track should query the NORAD Satellite ID number 22829. The name listed by Space Track is "EYESAT A".

More information of POSAT-1 can be found at:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html

http://www.amsat.org/amsat/sats/n7hpr/po28.html
[ANS-WSR wishes to thank Duane Naugle, KO6BT, for this week's update.]
[11062005]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launched: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB
Beacon: 145.810 MHz (unmodulated carrier)

AO-10 has been locked into a Mode-B, 70-cm uplink and
2-meter downlink for several years.

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: Non-operational

Uplink: 145.875 145.900 145.925 145.950 MHz FM (1200-baud)
Downlink: 435.812 MHz SSB
Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Alberto E. Zagni - I2KBD reports on 02/13/05
The spacecraft is in MBL (safe mode) and is trasmitting just 6 channels
of telemetry. Temperatures and voltage are nominal, but there seems to
be a problem with the onboard receiver, refusing to accept commands.
The spacecraft was launched in 1993, thus nearing 12 years in orbit...

Best regards
Alberto E. Zagni - I2KBD
ITAMSAT Mission Director

More information of IO-26 can be found at:

http://joshua.micronet.it/english/itamsat/itamsathome.html
http://www.amsat.org/amsat/sats/n7hpr/io26.html
www.itamsat.org

[02132005]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB
Beacon: 29.408 MHz
Robot: 29.454 MHz
[05232004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launched: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB
Beacon: 145.860 MHz
Robot: 145.908 MHz
[05232004]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launched: January 22, 1990

Status: Non-operational

Uplink 145.975 MHz FM
Downlink 435.070 MHz FM
[05092004]
=====
UO-22 UOSAT
Catalog number: 21575
Launched: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM
Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01092005]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational?

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB
Beacon: 29.352 MHz (intermittent)
SSB meeting frequency: 29.380 MHz (unofficial)

John, KD6PAG reports on June 16, 2004 to WSR:
RS-15 beacon seemed to be back in the mode where it's a tone about 5
seconds off and then 5 seconds on this morning.

WSR is looking for more confirmations of RS-15 coming back.

[ANS-WSR thanks John, KD6PAG for RS-15 information]
[06202004]
=====
LO-19 LUSAT
Catalog number: 20442
Launched: January 22, 1990

Status: CW Beacon only

Uplink: 145.84 145.86 145.88 145.90 MHz FM
(using 1200-baud Manchester FSK)
CW downlink: 437.125 MHz
Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)
Broadcast Callsign: LUSAT-11
BBS: LUSAT-12o

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[05232004]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[08152004]
=====
KO-23 KITSAT
Catalog number: 22077
Launched: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM
Broadcast Callsign: HLO1-11
BBS: HLO1-12

Jim, AA7KC, reports that KO-23's downlink transmitter continues in a
non-operational status.
[05092004]
=====

KO-25 KITSAT
Catalog number: 22828
Launched: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM (9600-baud FSK)
Downlink: 436.500 MHz FM
Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
PO-34 PANSAT
Catalog number: 25520
Launched: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink frequency (listed on the PanSat web site) 436.500 MHz

The satellite is not available for general uplink transmissions.

The Naval Postgraduate School developed PanSat. At the time of
launch, PanSat spread-spectrum digital transponders were to
be available to Amateur Radio operators along with software to utilize
this technology.

The satellite is still operating, however, the spread spectrum packet
radio portion never took place. The spacecraft is now beyond it's
initial 2-year mission life, but telemetry records are still being
downloaded.

For more information, visit the official PanSat web site at:
http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launched: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm

[ANS-WSR has no further information]
[05232004]
=====
SO-35 SUNSAT

Catalog Number: ?
Launched:February 23, 1999

STatus: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz and 145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[08082004]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launched: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlink: 437.025 MHz 437.400 MHz
Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA
web site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[05092004]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplink V-band 145.840 - 145.990 MHz CW/LSB
U-band 435.550 - 435.800 MHz CW/LSB
L1-band 1269.250 - 1269.500 MHz CW/LSB
L2-band 1268.325 - 1268.575 MHz CW/LSB
S1-band 2400.350 - 2400.600 MHz CW/LSB
Downlink: S2-band 2401.225 - 2401.475 MHz CW/USB
K-band 24,048.010 - 24,048.060 MHz CW/USB
Beacon: 2401.323, 24,048.035
[05232004]

SO-42 SAUDISAT-1B
Catalog number: 26549
Launched: September 26, 2000

Status: Non-Operational
Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[08152004]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz
Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[08152004]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
callsign KE6QMD, as per the user service agreement located at the
following
URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launched: September 26, 2000

Status: Operational

Uplink: 145.850 or 145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz
Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[11202005]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Semi-operational.

Uplink 435.275 1200-baud AFSK
Downlink 145.825 9600-baud FSK
(optional voice message)
Broadcast callsign: DP0AIS

AO-49 (SAFIR-M) is a German amateur radio payload onboard the small German
scientific satellite "RUBIN-2".

AO-49 was built by the German amateur radio association "AATiS e.V." (German
acronym for "Arbeitskreis Amateurfunk und Telekommunikation in der Schule",
which means: 'working group for amateur radio and telecommunications in
schools'). AO-49 is designed as a "store and broadcast" system for APRS
based messages, dedicated for the use of schools in combination with the
existing WX-Net and planned buoy experiments in Germany.

No transmissions detected since the 1st of February 2003! It appears AO-49
is not properly aligned to illuminate the solar panels. This should end
soon. Due to its orbit, AO-49 will be in a phase without eclipses until
13Feb03.

Martin DG8UAU has written a small software program "SAFIR-M Decoder" to
allow decoding of the received DATA0 frames. It is available at:
http://amend.gmxhome.de in the section Aktuelles.

Details on AO-49 (SAFIR-M) can be found at:
http://amend.gmxhome.de

Information about AATiS e.V. is available at:
http://www.aatis.de
[11132005]
NNNN
/EX

SB SAT @ AMSAT <KB9MMC $ANS-359.S4
WSR 359 Part 4 12/25/2005

AMSAT NEWS SERVICE BULLETIN 359.S4 FROM AMSAT HQ
SILVER SPRING, MD, December 25,2005
TO ALL RADIO AMATEURS
BID: $ANS-359.S4

THE FOLLOWING SATELLITES ARE NOT IN ORBIT BUT ARE
PROPOSED FOR LAUNCH AT THIS TIME:

UCISAT ?O-??
Catalog number:
Proposed Launch Date: October 31, 2005

Status: Under Construction

Downlink: Submission in Progress
Uplink: Submission in Progress
Callsign: Submission in Progress
[11272005]
=====
PHASE 3E ?O-??
Catalog Number:
Proposed Launch Date: Early 2006

Status: Under Construction

For the latest project status update please visit the AMSAT-DL
P3-E web page:
http://www.amsat-dl.org/p3e/

[ANS-WSR wishes to thank William Leijenaar, PE1RAH for this week's report]
[10022005]
=====
CP1 ?o-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N6CP
Proposed Transmit Frequency: 436.845
[03272005]
=====
CP2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.325
[03272005]
=====
HAUSAT1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: D90HP
Proposed Transmit Frequency: 437.465
[03272005]
=====
ICE Cube 1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: W2CXM
Proposed Transmit Frequency: 437.305

[03272005]
=====
ICE Cube 2 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: N2VR
Proposed Transmit Frequency: 437.425
[03272005]
=====
ION ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.505
[03272005]
=====
KUTEsat ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: KC0RMW
Proposed Transmit Frequency: 437.385
[03272005]
=====
MEROPE ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: K7MSU-1
Proposed Transmit Frequency: 145.980
[03272005]
=====
nCUBE1 ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
2407.25
[03272005]
=====
RINCON ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
437.345
[03272005]
=====

SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SACRED ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: WA4CEW
Proposed Transmit Frequency: 436.870
[03272005]
=====
SEEDS ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: JQ1YGU
Proposed Transmit Frequency: 437.485
[03272005]
=====
Mea Huaka ?O-??
Catalog Number:
Proposed Launch Date: Mid May 2005

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.405
[03272005]
=====
SUITSAT ?O-??
Catalog Number:
Proposed Release Date: December 8th, 2005

Proposed Callsign: RS0RS ?
Proposed Transmit Frequency: 145.990

This from Frank, KA3HDO:
I have recieved information that the Russian EVA that will deply SuitSat,
planned for December 8th, has been delayed to late January/Early February
2006. As we get more information, we will post it.

[ANS-WSR wishes to thank Frank Bauer, KA3HDO for this weeks report]
[11272005]
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ANS is released worldwide via the AMSAT ANS e-mail reflector and a live
radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz.
Pre-net operations start at 18:00 UTC, with current ANS bulletins trans-
mitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30

UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/amsat/listserv/menu.html

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James K. Darrow, KB9MMC.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to:
ans-editor{at}amsat.org
NNNN
/EX

438. ANS-359 AMSAT News Service Weekly Bulletin

Newsgroup: rec.radio.amateur.space
Date: 2005-12-26 20:45:10 UTC
From: JoAnne Maenpaa <wb9jej_no-spam@earthlink.net>
Message-ID: <qDYrf.652$M%4.499@newsread3.news.atl.earthlink.net>
Source record: 1752

AMSAT NEWS SERVICE
ANS-359

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* AO-51 Digipeater function enabled
* OSCAR SKN Next Weekend
* New Object Identified Near SSETI
* AMSAT Kid's Day on AO-51
* P3E to Fly Software Defined Transponder
* Eagle Fundraising Appeal
* ARISS Status - 19 December 2005

SB SAT @ AMSAT $ANS-359.01
AO-51 Digipeater function enabled

AMSAT News Service Bulletin 359.01
From AMSAT HQ SILVER SPRING, MD.
December 25, 2005
To All RADIO AMATEURS
BID: $ANS-359.01

The Digipeater function on AO-51 has been turned on for a "Trial Test Session". The test may be paused at any time. Please keep your digi packets down to a reasonable level as this is a shared resource. Only one uplink is in use, so the PBBS users and digi users are going to be on the same uplink frequency. This is a shared uplink and downlink with the PBBS, so do not overload it with continuous, or high duty rate, beacons or broadcasts.

This is not the 10 watt plus transmitter that is on the ISS. It will take a higher gain receiving station to hear the 9k6 signal of AO-51. You will not need a strong signal for the uplink though, as AO-51 hears very well. Note that the uplink and downlink are both at 9600 baud.

Downlink: 435.300 FM 9600 baud
Uplink: 145.860 FM 9600 baud
Digi Callsign: PACB-1

If you are using TlmEcho there is a bug in the program regarding the Digipeat Status display. That has been fixed in the new version, and a number of new features added as well. A new version of TlmEcho is expected to be released soon.

For the time being, if you monitor the 9k6 downlink you can use the LSTAT status message to verify that the digipeater is turned on. If the message contains "d:1", then the digi function is enabled. If it contains "d:0" the digi is turned off.

Mike, KE4AZN, added, "I want to personally thank Jeff, KB2M, and Gould, WA4SXM, for their help in testing the digipeat function."

[ANS thanks Mike, KE4AZN for the above information]

/EX

SB SAT @ AMSAT $ANS-359.02
OSCAR SKN Next Weekend

AMSAT News Service Bulletin 359.02
From AMSAT HQ SILVER SPRING, MD.
December 25, 2005
To All RADIO AMATEURS
BID: $ANS-359.02

Once again, AMSAT-NA is pleased to sponsor Straight Key Night on OSCAR for enjoyment by all radio amateurs.

OSCAR SKN 2006 will run for 24 hours, 0000-2400 UTC, on 1 January 2006. It's very simple: no rules, no scoring, and no need to send in a log. Just operate CW through any OSCAR satellite using a straight hand key, working as many other SKN participants as you can. Contacts via the moon (OSCAR Zero) count too.

As in past years, all participants are requested to nominate one of the operators they worked for "Best Fist" recognition. Your nominee need not have the best fist of those you heard, just of those you worked.

Please send all nominations to Ray Soifer via w2rs@arrl.net.

A list of those nominated will be published via the AMSAT News Service in early February, and in The AMSAT Journal.

[ANS thanks Ray, W2RS for the above information]

/EX

SB SAT @ AMSAT $ANS-359.03
New Object Identified Near SSETI

AMSAT News Service Bulletin 359.03
From AMSAT HQ SILVER SPRING, MD.
December 25, 2005
To All RADIO AMATEURS
BID: $ANS-359.03

Taft DeVere from Headquarters Airforce Space Command, (HQ AFSPC) reports that the Air Force has discovered a new object that is quite close to the SSETI payload. This new object has been cataloged as 28897. They believe that this object was ejected on 15 Dec 2005 at about 1640Z. Additional tracking data indicates that it is slowly moving away from SSETI. This leads to the conclusion that the object is not a lightweight piece of foil or Mylar type material, since these decay more quickly. It seems that this is likely an object with some mass, and radars report it is quite small.

Below is the two-line element set for the new object.

1 28897U 05043H 05356.70226803 .00000182 00000-0 48118-4 0 58
2 28897 098.1779 252.6230 0017791 005.4499 354.6921 14.59489332 382

The initial speculation is that this new object could be NCube-2 satellite although no postive reception reports have been received yet.

NCube-2's downlink is as follows:

Downlink: 437,305MHz
Bitrate: 9600b/s
Modulation technique: GMSK

The message:
"DE=LA1CUB=NCUBE2=FF=LA1CUB===" is morsed using a 2400Hz tone, 26 words per minute" where FF is a hex number [00=3,0V - FF=4,5V]

If battery voltage is above 3,8V, every 2 minutes
If battery voltage is below 3,8, every 5 minutes

In the end of the message an unnumbered AX.25 packet is attached containing
the string:
DE=LA1CUB=NCUBE2=NORWEGIAN CUBESAT - WWW.NCUBE.NO

In the header of the AX.25: Callsign: NCUBE Destination: EARTH

The satellite will transmit at a power of 1.5W at full battery charge

Reception reports will be welcome email to ncube@rocketrange.no and to missioncontrol@sseti.org

[ANS thanks Taft DeVere HQ AFSPC and Graham, G3VZV for the above information]

/EX

SB SAT @ AMSAT $ANS-359.04
AMSAT Kid's Day on AO-51

AMSAT News Service Bulletin 359.04
From AMSAT HQ SILVER SPRING, MD.
December 25, 2005
To All RADIO AMATEURS
BID: $ANS-359.04

AMSAT-NA, the AO-51 Command Team, and the AO-51 Operations Team will sponsor Kid's Day on AO-51 on January 8, 2006. The event will run from approximately 0100 utc 8 January until 0345 utc 9 January. The event is open to all kids, worldwide. We ask all amateur radio stations to give this short time window to promote satellite operations with kids, by actually showing a kid how to make contacts via AO-51, providing a station to contact, or stepping aside to allow others to make contacts with the kids.

During the event, please limit contacts to stations that are operating with kids at the microphone. This should allow the kids to have a nice QSO and pass some information. Kids can tell their name, age, who is helping them operate on AO-51, where they live, and other information about themselves.

AO-51 will be configured in the following mode during the event. Please note the change in the uplink frequency for the event. The PL tone will be turned off for the event.

Uplink: 145.880 mhz FM voice
Downlink: 435.300 mhz FM voice

The digital transponder on 435.150 will be turned off during the event.

See http://www.arrl.org/FandES/ead/kd-rules.html on the ARRL website for more Kids Day information.

Have fun and enjoy AO-51!

73 KE4AZN
Amsat VP-Operations
Echo Command Station

[ANS thanks Mike KE4AZN for the above information]

/EX

SB SAT @ AMSAT $ANS-359.05
P3E to Fly Software Defined Transponder

AMSAT News Service Bulletin 359.05
From AMSAT HQ SILVER SPRING, MD.
December 25, 2005
To All RADIO AMATEURS
BID: $ANS-359.05

AMSAT-DL's Board of Directors has made the decision to fly the Software Defined Transponder (SDX) on their Phase 3-Express (P3E) spacecraft. SDX features AMSAT-NA's implementation of the Software Defined Radio based on the Quadrature Sampling Detector. This decision was made at a recent BOD meeting in Marburg, Germany. SDX will utilize space that was originally planned for the Rudak Modem Module (RMU). SDX will allow Karl Meinzer's (DJ4ZC) HELAPS (High Efficiency Linear Amplification by Parametric Synthesis) ideas from his doctoral thesis to be fully implemented for the first time. With the use of the SDX processor,

significantly improved linearity and efficiency in the U/V transponder can be achieved compared to the all analog implementations of HELAPS in previous Phase 3 satellites.

Placement of SDX on P3E opens an opportunity to provide an early demonstration of SDX's potential in space, including placement in an orbit that will provide flight time through the radiation belts. This "Phase 1 test" of SDX will in turn provide flight proof of concept that will benefit the later placement of SDX on AMSAT-NA's Eagle-class spacecrafts. It also provides a test platform for evaluation of SDX's weak signal processing that could prove valuable for an eventual Phase 5-A deep space mission that AMSAT-DL is evaluating. Along with improved receiver performance, SDX offers the ability to program configuration changes while in orbit and the integration of uplink and downlink bands via digital connections.

Howard Long, G6LVB of AMSAT-UK, will lead the development of SDX software for both P3E and Eagle. AMSAT-NA's Bob McGwier, N4HY and Frank Brickle, AB2KT, will conduct the integration of SDX with P3-E's HELAPS transmitters. AMSAT-NA's Lyle Johnson KK7P, and Chuck Green, N0ADI, who have served on a number of AMSAT satellite projects, will build the flight hardware.

AMSAT-DL President Peter Guelzow, DB2OS informed Bob McGwier, N4HY AMSAT-NA's VP-Engineering of the Board's decision on November 28. "This is outstanding news" notes Rick Hambly, W2GPS President of AMSAT-NA. "The opportunity to fly SDX on P3-Express will provide an early opportunity to demonstrate the potential of SDX in orbit and gives AMSAT-NA the benefit of in-orbit testing before placement on the Eagle-class satellites."

At a December meeting in Marburg, Howard, G6LVB demonstrated the functional SDX software on the target DSP processor along with a fully functional STELLA (Satellite Transponder with Equalizing Level Limiting Adapter). STELLA is designed to handle the situation where a User transmits too much power to the satellite adversely impacting the overall transponder AGC levels and thus reducing the output levels of other users on the transponder. STELLA has the ability to dynamically notch an excessive input signal to bring it into compliance with an appropriate output level versus the beacon on that band. Hambly added, "This announcement and the follow on work reinforces the close cooperation between AMSAT-NA, AMSAT-DL and AMSAT-UK as we develop the next generation of high earth orbit amateur radio satellites."

[ANS thanks Peter, DB2OS and Barry, WD4ASW for the above information]

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SB SAT @ AMSAT $ANS-359.06
Eagle Fundraising Appeal

AMSAT News Service Bulletin 359.06
From AMSAT HQ SILVER SPRING, MD.

December 25, 2005
To All RADIO AMATEURS
BID: $ANS-359.06

Have YOU Responded to the Eagle Appeal?

AMSAT-NA members should have received by now an Eagle Appeal Letter from AMSAT-NA President Rick Hambly, W2GPS. The Appeal includes a letter from Rick, a color brochure on Eagle, a donation form, and return envelope. This is the first fundraising effort for Eagle as it is expected to take four years to build and launch the first satellite and three additional years for the second. AMSAT must raise at least $150,000 in 2006 to keep the project on track.

Initial response to the Appeal has been good. SpaceQuest, Ltd. of Fairfax, VA made our first corporate donation to Eagle this past week. Many thanks to Mark Kanawati, N4TPY and Dino Lorenzini, KC4YMG for the strong support! AMSAT members will recall that AO-51 was built by SpaceQuest under AMSAT-NA contract and was launched in June 2004. In addition, 12 individuals have qualified for President's Club status this week as a result of their generosity in response to the Appeal.

AMSAT-NA members who pay US income tax may take a tax deduction from their donation to AMSAT, which is recognized by the Internal Revenue Service as a 501-(c)(3) scientific organization. To qualify as a 2005 tax deduction, the donation must be post marked in 2005 or submitted in 2005. Donations made after January 1, 2006 may be applied against 2006 taxes. AMSAT will gladly accept donations via the AMSAT website using your credit card, the mailing of checks, and PayPal submissions. The AMSAT office will be closed until January 4, 2006, so making donations via telephone will not be possible until after the first of the year. In addition, individuals who may wish to donate securities can do so as well and avoid capital gains on the securities that are donated. Contact AMSAT Treasurer Gunther Meisse, W8GSM for details on how to arrange a transfer to AMSAT. Due to passage of the Katrina Emergency Relief Act of 2005 (KETRA) by Congress, there are additional advantages in giving charitable gifts by December 31, 2005 to qualified organizations, such as AMSAT. Talk to your financial advisor about how KETRA can provide current income and estate tax advantages.

Your donation and personal support of Eagle is critical. If you haven't made your contribution, please consider making a donation.

Help AMSAT to hatch Eagle!

[ANS thanks Barry, WD4ASW for the above information]

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SB SAT @ AMSAT $ANS-359.07
ARISS Status - 19 December 2005

AMSAT News Service Bulletin 359.07
From AMSAT HQ SILVER SPRING, MD.
December 25, 2005
To All RADIO AMATEURS
BID: $ANS-359.07

1. California Contact Successful

On Thursday, December 15, five students from Mt. Carmel High School in San Diego, California spoke to Bill McArthur, KC5ACR. Bill answered seventeen of their questions as an audience of approximately 35 students, teachers, and others gathered for the event. The radio equipment used for this contact will remain as the school amateur radio station. The contact audio was webcast by MSNBC, and was available on the IRLP and Echolink nodes. Twenty-two Echolink connections were made from the following countries: France, Iraq, Japan, Korea, Russia, Sweden, Thailand, the U.K., and the U.S.A.

Among the media covering the event were the North County Times, Union Tribune, and Corridor News. Links to two of the stories follow:

"Mt. Carmel High students make contact with the beyond."
http://www.nctimes.com/articles/2005/12/16/news/inland/21_11_4412_15_05.txt

2. 25th Asia-Pacific Scout Jamboree

The 25th Asia-Pacific Scout Jamboree has been approved for Saturday, 31 December 2005 at 0912 UTC. The jamboree is held once every four years with scouts, ages 12-18 and will be held this year from December 28 to January 3 in Sattahip, Chonburi Province in Thailand. The hosting committee expects a turnout of 25,000 participants from the around the world, but especially from the 23 member countries in Asia-Pacific.

3. Article on Canadian School Contact

Ralph McCall School in Airdrie, Alberta, Canada experienced a successful contact with the ISS on Friday, 02 December 2005. An article has been posted to Alberta's Wild Rose Chapter 151 website, which contains photos of the event. See: http://www.qsl.net/ve6afo/iss_contact2005.html

4. Story Covers Sanderson High School Contact

Sanderson High School students spoke with Bill McArthur via amateur radio on December 8. A write up on the contact can be found on the Big Bend Amateur Radio Club website. It includes the audio and photos of the event. See:
http://www.bigbendarc.com/photos-history/photos/iss/iss_index.html

5. McArthur Continues Voice Contacts

Over the 17-18 December weekend, Bill McArthur, KC5ACR, made contacts with stations in the U.S., Mexico, the Caribbean, Thailand, Japan, Italy, and Portugal. He has already made over 200 general contacts. ARRL covered his activity on the ISS ham radio station in the article, "ISS 12 Commander Shooting for WAC, WAS and Maybe DXCC from Space." See:

http://www.arrl.org/news/stories/2005/12/15/1/?nc=1

6. Russian Special Event Planned

Russian delegate, Sergey Samburov, RV3DR, reports that a special event is being planned for December 25 to commemorate the first anniversary of the death of cosmonaut Gennady Strekalov, U6MIR. Amateur radio operators are invited to participate. It is expected that Korolev and Star City stations will operate shortwave and UHF. Two contacts with the ISS are planned for December 25 and December 26 at 20:00 UTC. On December 26-27 the ISS Ham radio will be placed in repeater mode, and cosmonauts at Energia and Star City may also participate in the activities. Two thousand anniversary QSL cards with Strekalov's portrait have been printed for the event.

7. Educational Outreach/School Selection Committee Meeting Held

The ARISS Educational Outreach/School Selection Committee meeting was held on Thursday, 08 December 2005. Items of discussion included current school contacts, and NEEIS evaluations. The next meeting is planned for 09 February 2006. The minutes have been posted to the ARISS website. See: http://www.rac.ca/ariss/arissschm.htm

[ANS thanks Carol, KB3LKI for the above information]

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In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73 & Happy Holidays,
This week's ANS Editor,
Lee McLamb, KU4OS
ku4os at amsat dot org

439. APRSPoint holiday special

Newsgroup: rec.radio.amateur.space
Date: 2005-12-28 08:45:26 UTC
From: hxc98@yahoo.com
Message-ID: <1135759526.178982.25160@g44g2000cwa.googlegroups.com>
Source record: 1753

APRSPoint is a complete APRS package with integrated street-level maps.

We are offerring a holiday special right now. You can APRSPoint license

plus MapPoint 2004 for more than 30% off the regular price. Please
visit
http://www.aprspoint.com/ for details. Thanks.

440. Re: website

Newsgroup: rec.radio.amateur.space
Date: 2005-12-31 04:05:20 UTC
From: n9zle <NoSpam@nospam.com>
Message-ID: <4sntf.7087$oW.5636@newssvr11.news.prodigy.com>
Source record: 1754

I like the music.
Consider posting a link to your site on http://www.n9zle.com/forum
One of very few forums that allows links to outside sites.

73s N9ZLE

"Super DX" <superdx@free.fr> wrote in message
news:_Wwqf.508$Lp.315@nntpserver.swip.net...
> Hi all,
>
> here is a new ham website :
>
> http://superdx.free.fr
>
> 73's and Merry Xmas !
>
> Vince
>
>

441. Why not on the moon?

Newsgroup: rec.radio.amateur.space
Date: 2005-12-31 11:35:41 UTC
From: wa3ymm <wa3ymm_pa@verizon.net>
Message-ID: <h2utf.3227$gq4.1127@trndny04>
Source record: 1755

Why have we not tried to put a repeater or tranverter on the moon our natural satellite? I seem logical to shoot for this goal.

WA3YMM

442. Nominations Sought For 2006 Dayton Hamvention® Awards

Newsgroup: rec.radio.amateur.space
Date: 2005-12-31 19:34:37 UTC
From: policy-ham <hamop_62@hotmail.com>
Message-ID: <1136057677.430245.109330@g49g2000cwa.googlegroups.com>
Source record: 1756
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space

Dayton Hamvention® 2006
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Dayton Ohio 45401-0964
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On-Line: http://www.hamvention.org

Press Release
(December 28, 2005)

Nominations Sought For 2006 Dayton Hamvention® Awards

The Dayton Hamvention ® now is accepting nominations for its 2006 awards for Radio Amateur of the Year, Special Achievement, and Technical Excellence. The deadline for nominations is February 20, 2006.

All amateur radio operators are eligible. The winners will be recognized at the 2006 Hamvention ®, which runs May 19-21.

· The Radio Amateur of the Year Award goes to an individual who has made a long-term, outstanding commitment to the advancement of Amateur Radio.

· The Technical Excellence Award is for the person who has made an outstanding technical advancement in the field of Amateur Radio.

· The Special Achievement Award honors someone who has made an outstanding contribution to the advancement of Amateur Radio, usually someone who has spearheaded a significant project.

The Hamvention® Awards Committee makes the decision on all awards based in part upon the information it receives--and not on the number of nominations submitted.

Documentation that informs the Awards Committee of a candidate's accomplishments may include magazine articles, newsletters, newspaper clippings, and even videos. (Note: These materials become the property of Hamvention and will not be returned.)

Nominations are due by February 20, 2006. Additional details on these awards and a nomination form are available on the Dayton Hamvention® Web site <http://www.hamvention.org/nominate.htm>. Nominations also are accepted via US mail to Dayton Hamvention® Awards, PO Box 964, Dayton, OH 45401.

The Dayton Hamvention® is the world's largest gathering of amateur radio operators. It is expected to bring more than 25,000 of the worlds

radio amateurs to the Dayton area next May.

For more information please send e-mail to: media@hamvention.org